

THE
**NATION'S
SCHOOLS**

MAY 1953

San Diego schools lead in disaster defense • Teachers speak freely in opinion poll • This question of subversives • Philadelphia schools attack reading problem • Driver education here to stay • Junior high designed for individuals • Ground reflectance

THE MAGAZINE OF BETTER SCHOOL ADMINISTRATION

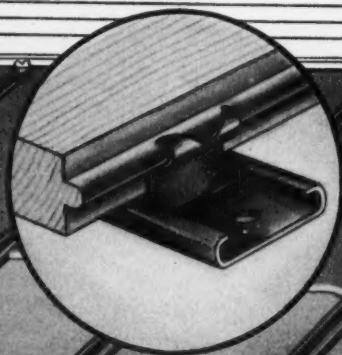
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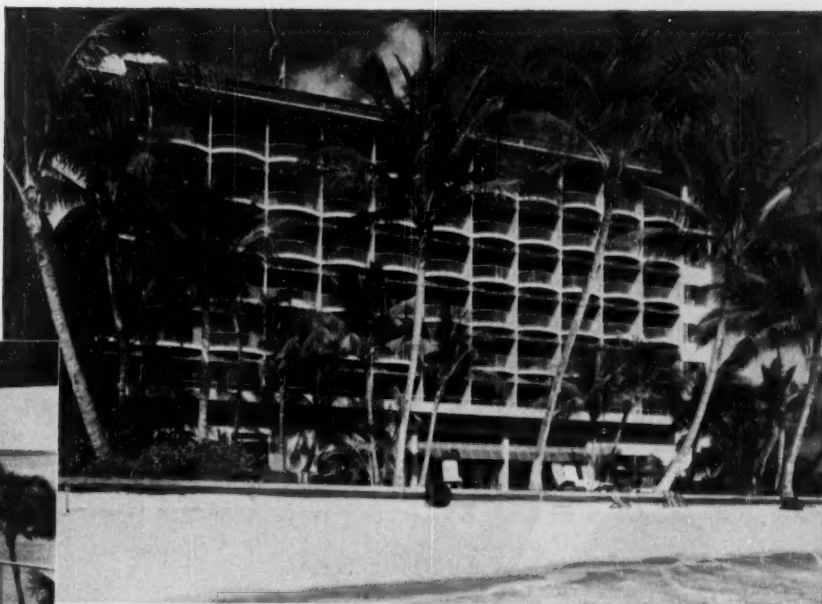
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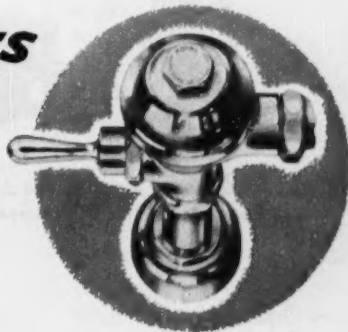
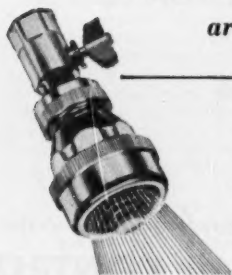
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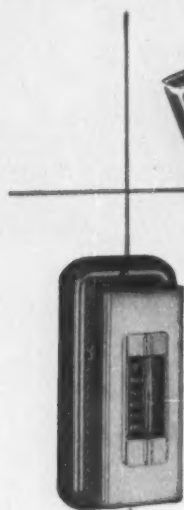
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Clifford M. Granger School, Agawam, Mass. Paul Beekman Johnson, architect, Springfield, Massachusetts.

Agawam, Massachusetts, long has enjoyed the reputation of having outstanding schools. Careful and thrifty planning has enabled this community of 10,000 to build some of the finest and most modern school buildings in Western Massachusetts.

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The Nation's Schools

THE MAGAZINE OF BETTER SCHOOL ADMINISTRATION

MAY 1953

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Published monthly and Copyright 1953 by The Nation's Schools Division, The Modern Hospital Publishing Co., Inc., 919 North Michigan, Chicago 11, U.S.A. Otho F. Ball, president; Raymond P. Sloan, vice president; Everett W. Jones, vice president; Stanley R. Clague, secretary; John P. McDermott, treasurer. Yearly subscription, United States and Canada, \$3; foreign, \$4. Current copies, 35c each. Member, Audit Bureau of Circulations; Educational Press Association of America. Entered as second-class matter Jan. 16, 1928, at the Post Office at Chicago, Ill., under the Act of March 3, 1879. Published on the 20th of the month preceding the date of issue. Allow 30 days in advance of publication date for change of address.

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AMONG THE AUTHORS

By the time this magazine is off the press, CLAUDIUS O. JOHNSON will have arrived in Australia, where he will be a Fulbright lecturer at the universities of Sydney and Melbourne during the 1953-54 school year. Dr. Johnson, who expresses on page 47 some views on the question of subversives, is professor of political science (special rating) at the State College of Washington. Before entering the college field in 1921, he was a high school principal at Ivor, Va. As a college teacher Dr. Johnson has been an instructor in, and later assistant professor of, political science at the University of North Dakota; professor of political science at the University of Chattanooga, Chattanooga, Tenn., and professor of political science and chairman of the department of history and political science at the State College of Washington.



B. F. Shafer

"I am not running for office," said B. F. SHAFER, when asked to fill out a biographical sketch blank. However, Mr. Shafer did admit to 24 years as superintendent of schools at Freeport, Ill.; before that a position as superintendent at Jackson, Ill., and an M.A. degree from the University of Chicago.

On page 62 Mr. Shafer describes the new junior high school which was completed recently at Freeport.

Among the pioneers involved in the Philadelphia schools' attack on the reading problem (p. 52) were C. LESLIE CUSHMAN and ROSEMARY M. GREEN. Dr. Cushman has been associate superintendent in charge of curriculum planning and teacher education for the Philadelphia schools since 1943. Before that he held various teaching and administrative posts in schools in Iowa, Oklahoma and Colorado. . . . Miss Green is special assistant for secondary reading in the curriculum office of the Philadelphia school district. In the past she has taught in public elementary, junior high and senior high schools in the same city. Miss Green was a member of the Scandinavian Life Experience Group, which spent the summer of 1952 in Europe under the joint sponsorship of the National Education Association and the Danish Society.

Citizens in North Carolina are having their say about educational problems, thanks to the efforts of such men as ALLAN S. HURLBURT and SAMUEL M. HOLTON (p. 73). Dr. Hurlburt is director of the bureau of educational research and service and cooperative project director at the

University of North Carolina. Before going to the university in 1951 he was supervising principal of schools at Ludlowville, Peru and Horseheads, N.Y.; director of the bureau of educational services at Cornell University; head of the department of administration and education at East Carolina College, Greenville, N. C., and director of the North Carolina Survey of Public Education made by the state department of public instruction. . . . Dr. Holt is assistant professor of education and cooperative project research director at the University of North Carolina. He has been a member of the university's faculty since 1948.

JOHN S. URLAUB certainly is one of the teachers of driver education in California who has a "special interest in the subject" (p. 81). He's counselor and driver education teacher at Berkeley High School; wrote his doctoral dissertation on driver education; is instructor in driver and safety education for the extension division of the



John S. Urlaub

University of California at Berkeley; is educational consultant for the American Automobile Association, and during the past several years has conducted driver education institutes for teachers at colleges and universities in six states—Montana, Wyoming, Nebraska, Idaho, North Dakota, and California. Before accepting his present position at Berkeley in 1948 he was high school principal at Mahomen, Minn., dean of boys at Chico High School, Chico, Calif., and dean of boys at Berkeley High School.



Florence C. Guild

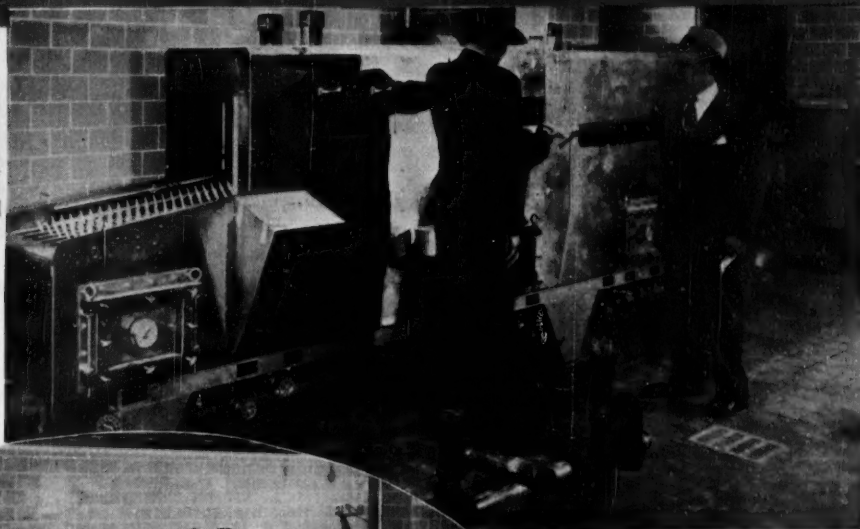
One way to combat the teacher shortage is described on page 79 by FLORENCE C. GUILD. Miss Guild is now coordinator of secondary education for the Indianapolis schools. Previously she taught English at the junior-senior high school in her hometown, Medaryville, Ind., and at Arsenal Technical Schools in Indianapolis and was head

of the English departments at Thomas Carr Howe and Shortridge high schools, both in Indianapolis. Miss Guild is active in national, state and local educational organizations; she is a member of the board of directors of the National Council of Teachers of English, past president of the Indiana Council of Teachers of English, and past president of the Indianapolis Council of Administrative Women in Education.

Toffenetti chooses BLAKESLEE *for new Greyhound Terminal Restaurant*



RIGHT—Mr. D. L. Toffenetti inspects two new Blakeslee 8583 dishwashing machines that are being installed in the two modern kitchens of his new restaurant in the Greyhound Bus Terminal in Chicago.



LEFT—These stainless Steel Blakeslee-Built dishwashing machines have a basketless conveyor with molded Nylon pegs set in molded plastic slots. No metal can scratch or chip the dishes which pass through the machine in an upright position for better draining and drying.

Mid a maze of pipes, paint and plaster, one can see the emergence of a show-place restaurant in the magnificent new Bus Terminal in Chicago. D. L. Toffenetti is opening his ninth dining place—a lavishly planned project with a seating capacity for 600 persons. Eight thousand meals a day can be served to Chicagoans and to travellers boarding the 800 buses that will daily use the new terminal. For his two kitchens, Mr. Toffenetti has chosen Blakeslee-built kitchen machines to maintain the efficient service and sanitation for which he is justly famous. In addition to the two dishwashing machines pictured, the new kitchen will boast two Blakeslee GW5 glass washers and two 50B vegetable peelers. Here is the latest in money-saving equipment for the greatest efficiency in kitchen operation. These installations were made by Albert Pick & Co., Chicago.

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MEGASCOPE

a brief, analytical look at several features
in this issue by CALVIN GRIEDER, professor of
school administration, University of Colorado



San Diego Leads the Way. San Diego's civil defense program for the schools (p. 43) shows how a well organized school system can take special jobs in its stride. It is likely that, especially in the midlands, considerable complacency prevails toward civil defense. Relatively exposed cities, such as San Diego, can lead the way, but, in this age of long-range supersonic flight and fantastic guided missiles, no community can feel immune from enemy attack.

Sane Thinking About Subversion. Claudius O. Johnson calls for a code of decency and sanity for our efforts to root out and combat subversion (p. 47). We need a lot more of his sort of thinking—there is a great present danger of totalitarianism in this land of liberty. Values that made America great and that we prize are undoubtedly threatened.

Accent on Reading Improvement. The Philadelphia reading program in secondary schools (p. 52) has amply demonstrated its worth. Most striking to me is the application of that age-old precept of teaching: Take the pupil where you find him and go on from there. It is so much easier to bewail the "poor work" done in elementary schools. I also like the use of "reading improvement" instead of "remedial reading." The latter term has connotations of inferior or unsuccessful prior instruction, with an innuendo of condemnation usually not justifiable.

Operation Bootstrap. The report on Duplin County's school improvement program (p. 73), sponsored by the C.P.E.A. in North Carolina, might well be called an "operation bootstrap." It is a good example of what can be done when cooperative efforts are made to tap and harness the immense potential of citizen interest in education. It would be interesting to have

annual follow-up stories on this kind of enterprise to see where and how it comes out over a period of years.

Administrators Share the Blame. Numerous clues for administrators, as well as for institutions and agencies concerned with educational administration, are provided by Hollis A. Moore Jr. in his second article on in-service education (p. 56). As a university professor, I am especially interested in the reactions of his respondents to colleges and universities and agree that some of the negative criticisms are warranted. However, as Moore points out, the responsibility for utilizing available services and soliciting new ones rests largely with superintendents. Many of them seldom if ever capitalize on services now offered. I cannot agree that university courses for administrators, so far as I am acquainted with them, generally "fail to meet today's demands." That may have been true formerly, but I doubt if it's true now. Other C.P.E.A. research under way will adduce more evidence.

Within Reach of Any School. The Indianapolis teacher recruitment program described by Florence C. Guild (p. 79) is not beyond the reach of any school system. It is especially noteworthy in that it recognizes the obligation of public school systems to help relieve the shortage of teachers. Teacher education institutions can learn one important thing, too: Contact with children is one of the great joys of teaching; much more of it should be provided for in many professional curriculums.

The Need Increases. If the needs of youth and of society are duly considered in formulating high school programs, driver education certainly ranks high. Learning to drive safely is vastly more difficult and hazardous than it was 20 or 30 years ago. This is a

fact overlooked by the academicians who abhor the "dilution" of hallowed standards of secondary education. John S. Urlaub's report on California's progress is encouraging (p. 81), and his recommendations are excellent.

New Framework for Reorganization. As suggested by Lee O. Garber (p. 76), bit by bit the legal frame of reference for reorganized school districts is being forged. Nothing like the widespread reorganization of districts which began about 1940 has ever occurred before; the older consolidation movement was not the same. Thus we see that the law and its interpretation must keep pace with new conditions—all a part of the evolutionary process that is one of the glorious attributes of American democracy.

TV-Inspired Cooperation. That hitherto undreamed of types of community cooperation are issuing from the impact of television on education is the thesis that Edgar Fuller propounds on page 90. Many administrators believe that the one-year period originally allowed by the F.C.C. has been too short in view of the tremendous difficulties of organizing for educational TV and of financing it.

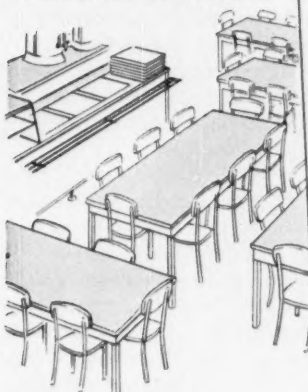
No Need to Be Hectic. The central importance of the building principal for the realization of significant values of the school lunch is well expressed by Evelyn McIntyre (p. 96). Her experiences in "sparking" an outstanding lunch program afford many suggestions for other principals. She also shows that the lunch hour need not be the hectic scene it so often is, but a time of pleasant relaxation.

Now Is the Time. Alfred C. Lamb's article (p. 102) on the maintenance of exterior wood and masonry appears in good time for the summer repair program. The economy of regular maintenance has been proved to the hilt. Lamb's recommendations and pictures are highly practical.

Evidence of Good Planning. The tenet that the planning of a school program should precede the planning of the building is frequently violated. The new junior high school at Freeport, Ill., described by B. F. Shafer (p. 62), attests to the validity of the principle. The real test of any schoolhouse comes after it has been put into service. This fine building has met the test with flying colors.



RESURFACE OLD DESKS



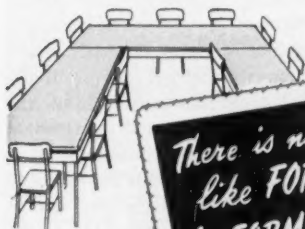
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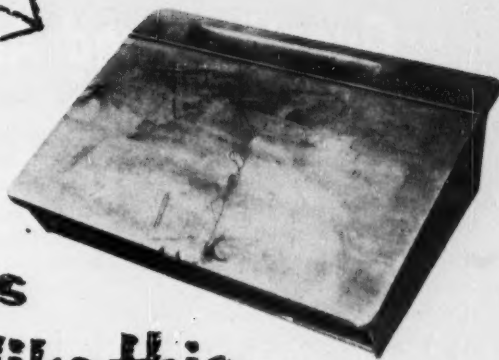
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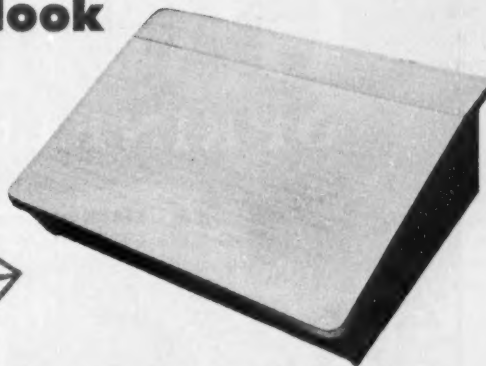
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Questions and Answers

Figuring Cubic Content

What is the usual method of figuring cubage of school buildings to arrive at the cubic foot cost?

The American Institute of Architects uses the following standard method of calculation:

"Definition. The cubic content (cube or cubage) of a building is the actual

cubic space enclosed within the outer surfaces of the outside or enclosing walls and contained between the outer surfaces of the roof and 6 inches below the finished surfaces of the lowest floors.

"Interpretation. The foregoing definition requires the cube of dormers, penthouses, vaults, pits, enclosed

porches and other enclosed appendages to be included as a part of the cube of the building.

"It does not include the cube of courts or light shafts, open at the top, or the cube of outside steps, cornices, parapets, or open porches or loggias."
—A.H.R.

College Entrance Agreement

What is the Michigan plan for changing the traditional pattern of college entrance requirements?

The Agreement Program, a cooperative arrangement between high schools and colleges in Michigan, has been maintained since 1946.

As one of their major contributions to the program, the colleges agreed to disregard the pattern of subjects pursued in considering for admission the graduates of participating high schools, provided they were recommended by the schools from among the more able students in their graduating classes. It was understood also that the agreement did not imply that students must be admitted to certain college courses or curriculums for which they could not give evidence of adequate preparation, such as engineering, which requires certain mathematical background.

High schools agree to maintain an adequate personal file about each student, to conduct a basic curriculum study, to carry out a follow-up of former students, and to devote special emphasis to vocational and educational guidance.—LEON S. WASKIN, *Michigan Department of Public Instruction.*

1953 Outlook for Polio

What is the polio outlook for 1953?

Scientists are now planning the first field trials of a polio vaccine, and manufacturers are producing the blood fraction, gamma globulin, for limited use as a temporary preventive of paralysis.

Despite this, 1953 will see outbreaks of polio; we cannot count on any startling reduction of cases this year. Reasons: (1) The vaccine is *not* here—it has yet to be tested. (2) Despite every effort of the National Foundation for Infantile Paralysis, the American Red Cross, and government authorities, gamma globulin will be in such short supply it can be given to fewer than 1,000,000 children out of a population of 46,000,000 in the most susceptible age groups.—*National Foundation for Infantile Paralysis, New York.*



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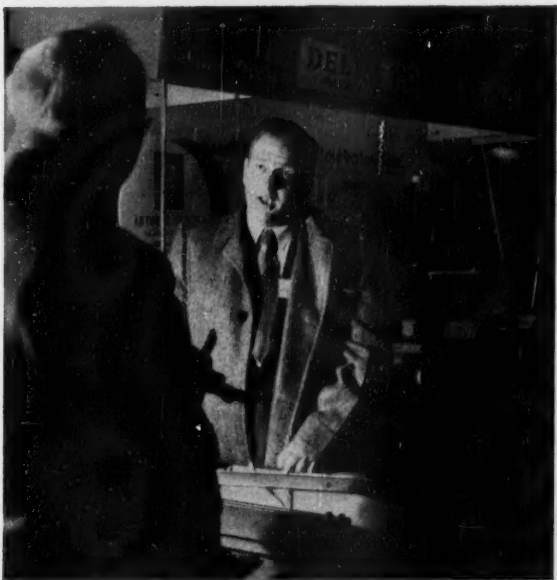
Here's What a Teacher Says About **DELTA**



"HELLO, JOHN" Vergene E. Dunbar, right, greets John Claude, Delta school sales supervisor at the AVA convention. Mr. Dunbar is instructor in cabinetmaking at Brockton, Mass., Vocational School. Two evenings a week he teaches apprentice training. On other evenings and week-ends he works in the cabinet shop of Harry K. Schneider, Hudson, Mass., building show cases, store fixtures, kitchen cabinets, doors, windows and the like. So as you see, Mr. Dunbar knows power tools.



"BEST VALUE" "I've worked with all kinds of tools," says Mr. Dunbar, "but none compare in value with Delta. For teaching or for professional work you get your money's worth with Delta." In his school shop and at the cabinet shop he uses such Delta tools as the table saws, sanders, lathes, planers, jointers, shapers, drill presses, and so on. He reports that Delta accuracy is important for fine cabinet work, and the many safety features and guides in Delta tools speed up training of beginners.



MR. DUNBAR is a real Delta booster. "Anyone who has worked with Delta tools, and more important, any teacher who has used Delta tools in his classes, is already sold," he says. Mr. Dunbar himself has taken over 4000 hours of work in various cabinet making courses, worked in the woodworking industry from 1935 to 1948, and since that time has been an instructor. So, his opinion on power tools carries the weight of experience.

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EARL A. DIMMICK.....*Pittsburgh Public Schools*
ARTHUR DONDINEAU.....*Detroit Public Schools*
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JULIUS E. WARREN.....*University City Public Schools*
W. T. WHITE.....*Dallas Public Schools*

READER OPINION

How Come? Says Superintendent to Parents in Concord, Mass.

From Harold B. Gores, superintendent of Newton public schools at Newtonville, Mass., comes an encouraging letter and an intriguing bit of copy written by one of his fellow superintendents. Here's what Supt. Gores says:

"Now that the style of *The NATION'S SCHOOLS* is moving toward that of the *New Yorker* and other magazines that have some sympathy for the reader, I am encouraged to send you an item which came to my desk today. It is written by Radcliffe Morrill, superintendent of schools at Concord, Mass., for his publication to parents. The unusual angle is that Mr. and Mrs. Morrill, who have two daughters in college, have just become the proud parents of a baby girl, which happy miracle he uses as a timely analogy for the need of a new school. The fact that the town meeting voted (unanimously!) an appropriation for preliminary plans may not be coincidental."

Supt. Morrill's message to his patrons in Concord was worded as follows:

"A SUPERINTENDENT THINKS OUT LOUD"

"Some perplexing thoughts often pass through the mind of a superintendent of schools as he is faced with the task of informing the people of the community that school facilities are inadequate to house a rapidly growing school population. He knows as a husband and as a father that sometimes a family grows a little faster or larger than he had planned or expected. He knows that with each new arrival certain family adjustments have to be made. Most families he knows make these adjustments willingly, and seek to provide all they can for the new arrival's health, comfort, and future development. Seldom does he hear parents say: How cheaply can one get by in raising this child? What are the minimum requirements of keeping body and soul together? Can we afford to give him more? More often than not it is surprising to note how much many parents *can* do for their children even when means are limited. (Cont. on Page 128)

The Great New CARPENTER

Premier SCHOOL BUS for 1953



- ★ **BEAUTIFUL NEW STYLING FROM FRONT TO BACK**
The new Premier, a symbol of modern engineering, utmost safety, dependability and economy.
- ★ **SAFETY ENGINEERED CONSTRUCTION THROUGHOUT**
Greater strength and greater safety have been accomplished with integrated welded construction.
- ★ **GREATER PASSENGER COMFORT AND PROTECTION**
The spacious interior is attractive and comfortable. The new Posturized seats are upholstered in the color you choose.
- ★ **DYNO-THERMIC HEATER, VENTILATOR, DEFROSTER**
An exclusive Carpenter feature. With the Dyno-Thermic unit you can Climatize the interior of your school bus.

SEE YOUR NEAREST DISTRIBUTOR OR WRITE TO CARPENTER BODY WORKS, MITCHELL, IND.

Roving Reporter

School Library Club Provides Interesting Activities • Unique Report Card Proves So Popular It Has to Be Copyrighted • An Active Campaign for More P.T.A. Members Is Successful • Lessons From Growing of Vegetables

OF THE 540 STUDENTS enrolled in Wilson High School, Cedar Rapids, Iowa, 104, or nearly a fifth, belong to the school's library club, founded in 1946.

Forty-eight of the members give at least one period a week to working at the library—typing, filing and mending books. At monthly meetings half the time is used for a business session and the other half for a planned program, book reviews, travelogs and so forth. The club also has two social gatherings during the year—a picnic in the spring and a party sometime during the winter.

The club has taken on a number of projects, too. During the Christmas season members read Christmas stories to young children at the Sunshine Mission, Salvation Army, Community House, and the Children's Home. They enjoyed doing it and are continuing to read books to children during the remainder of the school year.

Two projects were undertaken to help countries overseas. The students collect used postage stamps and send them to the Netherlands to be used to help finance the TV project there. Also, books members have read and are willing to give away are sent to needy European countries.

WHEN THE 1952-53 SCHOOL year opened, the membership committee of the Annie Camp Junior High School P.T.A. at Jonesboro, Ark., was faced with the problem of trying to find a more successful way of interesting parents in the P.T.A.

The committee asked each teacher for a list of the parents of children in her homeroom. Then a form letter was sent which pointed out each parent's responsibility to his child and school and urged active participation in the P.T.A. Sent with the letter was a small envelope prepared for membership dues; parents were asked

to write their names, addresses and telephone numbers on the envelopes and take them to the first P.T.A. meeting or send them back to the teachers with children.

After the first meeting a list of members and nonmembers was compiled, and homeroom mothers were asked to make personal contact with the nonmembers. The goal of 300 members this year was double the number for the previous year; the P.T.A. now has 248 members, with 147 homes represented. Average attendance at the monthly meetings has been 54.



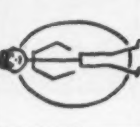
A bulletin called *Junior High News* is sent to each P.T.A. member to announce each meeting. A list of activities of the school for the coming month and faculty announcements also are included in the bulletin.

VEGETABLES GREW in a fourth grade classroom at North Syracuse, N.Y., when a unit on good eating led the youngsters to decide to plant a garden.

Fertilized black soil and boxes were obtained through three of the fourth graders whose fathers were truck farmers. The children divided themselves into groups of six, which did a little research to find out what vegetables would grow the quickest and easiest in the classroom. They decided to plant radishes, leaf lettuce, green onions, and carrots.

The day the vegetables were planted one child in each group read the directions while the others carried them out. Then the boxes were set on the ledge near the windows. Each day a different child took the responsibility for watering and weeding the gardens they had made.

When the vegetables were ready to be picked, the class decided to use part of them for a tossed salad. The others were cooked to illustrate how vitamins can be conserved in cooking.

	1		1		1
	2		2		2
I bring in worthwhile material.		I obey quickly and cheerfully.		I relax at rest time.	

Copyrighted Feb. 2, 1953, by school district of borough of Indiana, Indiana County, Pennsylvania.

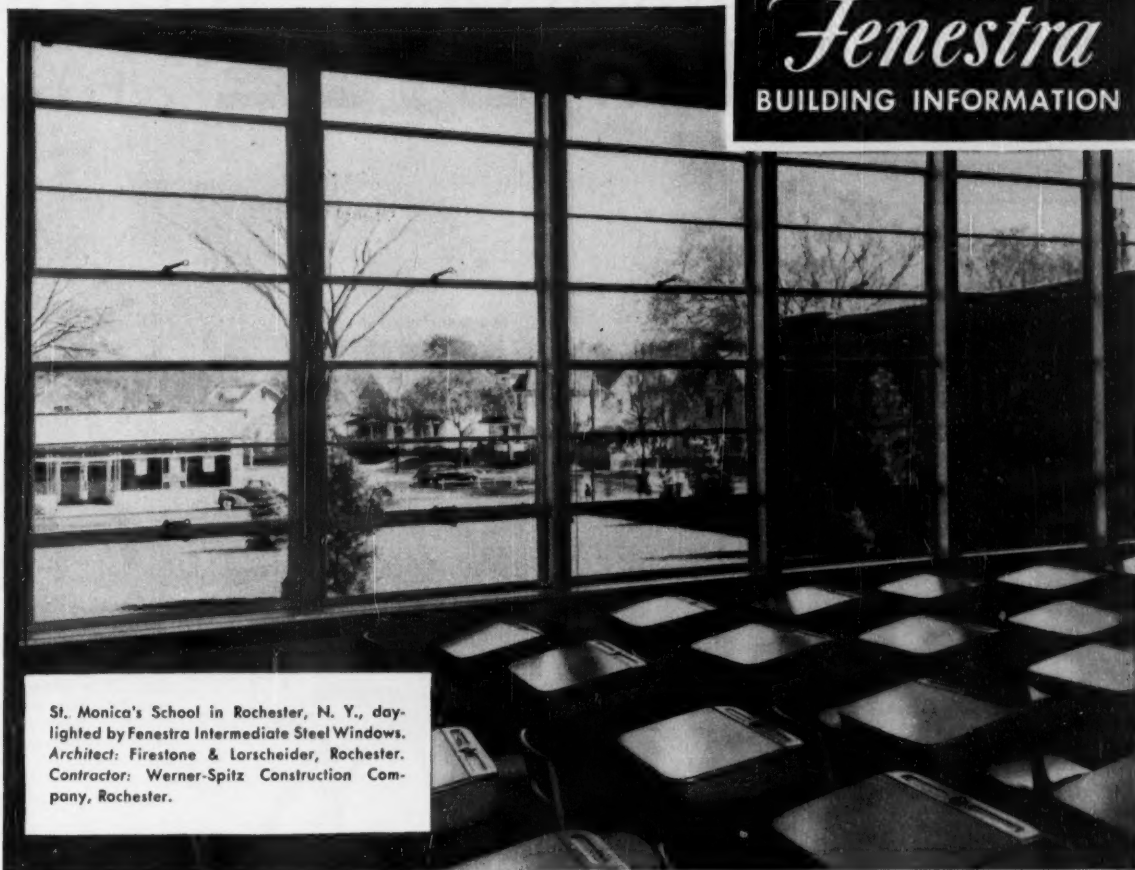
A REPORT CARD that appeals to the child's eye and shows his parents how he is progressing in kindergarten has been developed by a teacher study group in Indiana, Pa.

The report card is a four-page, 7 by 10 inch folder. Twenty-one items, such as "I follow directions accurately," "I sing songs in tune," "I take responsibility," are listed and illustrated with stick figures. Some of the drawings are in color—the three primary colors, blue, red and yellow, are used. Each of the items is marked "S" (satisfactory), "I" (improvement shown), or

"N" (need for improvement) by the teacher. There also is room for the teacher to write comments. The card is used for both the first and the second semesters.

Before this report card was adopted in Indiana, the teachers studied 80 report cards from other school districts.

A number of ideas from other schools were adopted, and some original ideas were worked out in Indiana. The card has proved so popular with other educators that the Indiana schools have copyrighted it.



St. Monica's School in Rochester, N. Y., daylighted by Fenestra Intermediate Steel Windows. Architect: Firestone & Lorscheider, Rochester. Contractor: Werner-Spitz Construction Company, Rochester.

How much of this free light would you block out?

Most of the school year, you need to *bring in* all the daylight you can. *Clear glass* brings in more daylight than any other kind of glass. And with Fenestra® Intermediate Steel Windows you get *extra clear glass area* because Fenestra's frames are designed to be strong and rigid without being *bulky*.

These modern windows open up your whole room for an atmosphere of freedom and alertness.

You get controlled fresh air

through the protecting vents in any kind of weather. You're protected from drafts. And rain can't get in.

Washing and screening are done from inside. Maintenance is simple and economical. Broken glass can be replaced easily and economically.

Available Super Galvanized
Fenestra Steel Windows are available Super Hot-Dip Galvanized for complete protection from rust . . . *no painting necessary*. This Super Galvanizing is done in a

special Fenestra plant . . . only Fenestra can offer it.

When you're buying daylight, get your money's worth . . . Fenestra Intermediate Steel Windows—by America's largest steel window manufacturer. And for your free copy of *Better Classroom Daylighting* by Lighting Expert R. L. Bieseke, Jr., and his staff, write Detroit Steel Products Co., Dept. NS-5, 3405 Griffin St., Detroit 11, Michigan. ♦♦

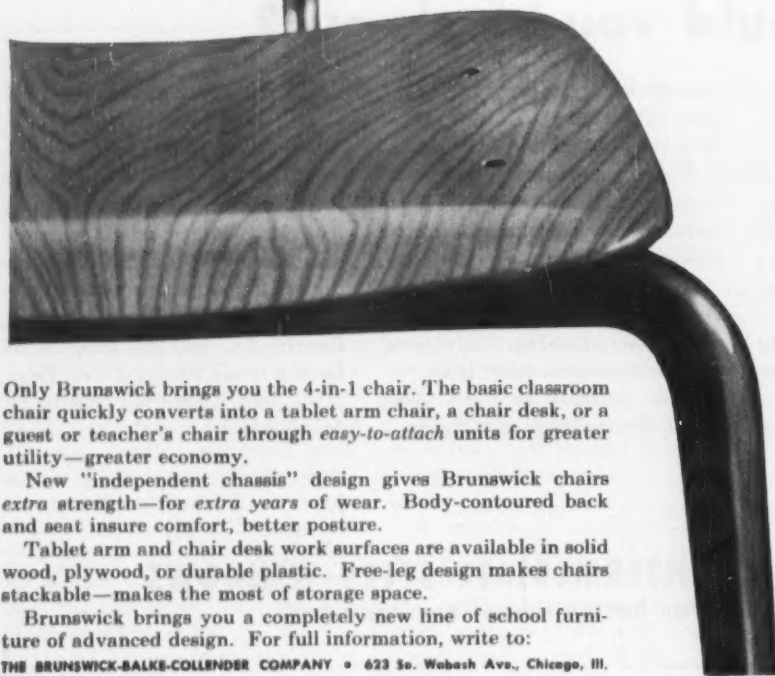
Fenestra

INTERMEDIATE STEEL WINDOWS
For better school environment . . .

Only Brunswick offers you the **FOUR** in **ONE** chair



BRUNSWICK



Tablet Arm Chair—Exclusive "Write Angle" work surface unit quickly converts basic chair to tablet arm chair. Offers the ultimate in writing comfort. Right- or left-hand units.



Chair Desk—Trapezoidal work surface unit quickly converts basic chair to chair desk. Plus elbow support for extra writing comfort. Easy accessibility. Right- or left-hand units.



Guest Chair—Comfort-curved arm rest unit quickly converts basic chair to guest chair. Dust-free book rack optional on all chairs.

Only Brunswick brings you the 4-in-1 chair. The basic classroom chair quickly converts into a tablet arm chair, a chair desk, or a guest or teacher's chair through *easy-to-attach* units for greater utility—greater economy.

New "independent chassis" design gives Brunswick chairs *extra* strength—for *extra* years of wear. Body-contoured back and seat insure comfort, better posture.

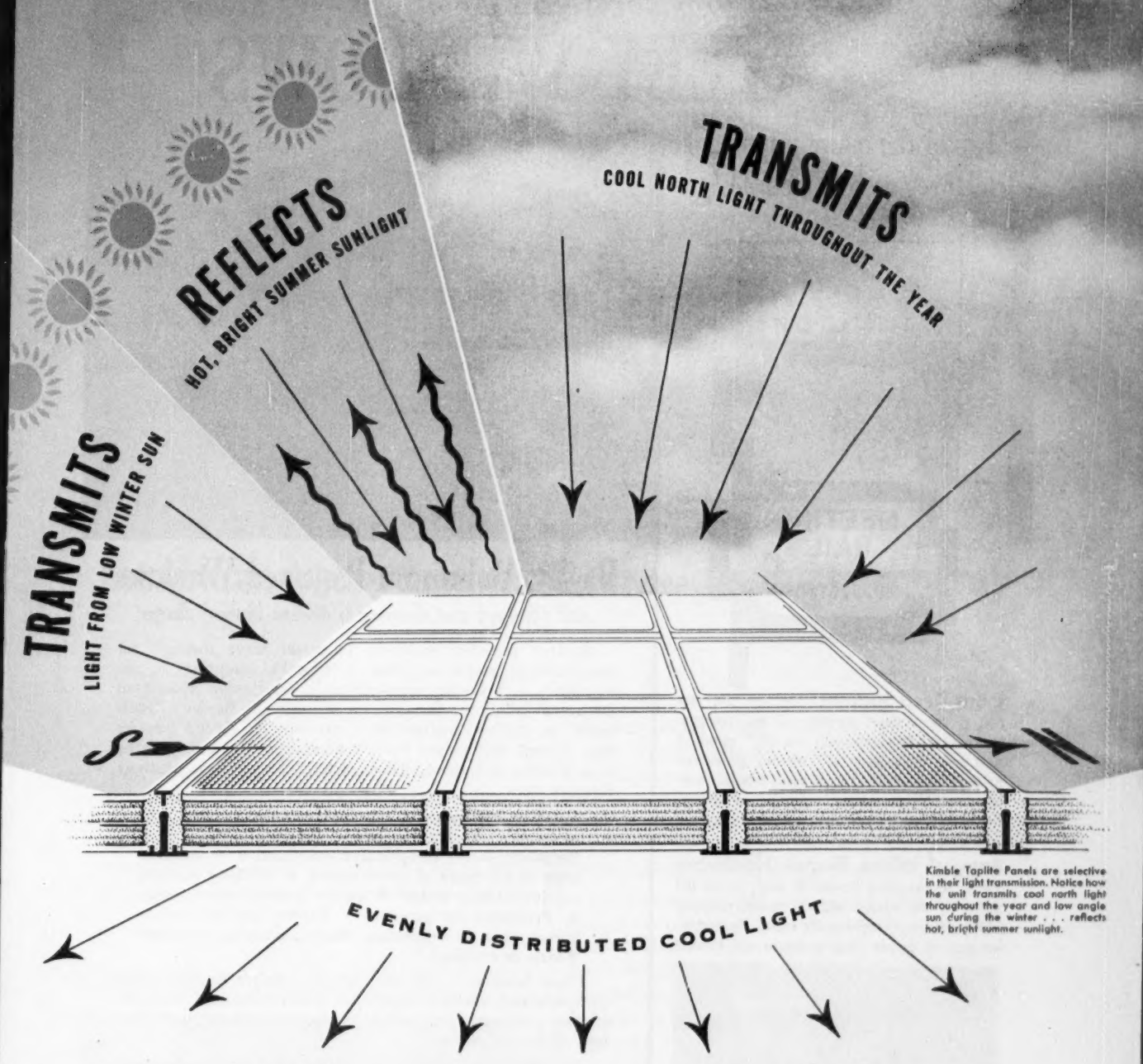
Tablet arm and chair desk work surfaces are available in solid wood, plywood, or durable plastic. Free-leg design makes chairs stackable—makes the most of storage space.

Brunswick brings you a completely new line of school furniture of advanced design. For full information, write to:

THE BRUNSWICK-BALKE-COLLENDER COMPANY • 623 So. Wabash Ave., Chicago, Ill.

Brunswick

The NATION'S SCHOOLS



ANNOUNCING TOPLITE—a new idea in daylighting

Kimble Toplite Panels limit and control the heat and amount of light entering a building from overhead. Here is the new way to daylight deep interior areas too far removed to be effectively reached by conventional, side-wall, prismatic glass block panels.

Kimble Toplite Panels distribute diffused daylight evenly over wide areas that are far from outside walls. They reflect hot summer sun . . . have unusual ability to reduce solar heat transmission. There are no hot spots, eye-fatiguing glare, nor concentrations of light. Kimble Toplite

Panel Units have an insulating value equivalent to double glazing or side-wall glass block.

Want more information about this great, new advance in daylighting? Write Insulux Glass Block Div., Kimble Glass Company, Dept. NS5, Box 1035, Toledo 1, Ohio.



Kimble Toplite supplements Insulux Fenestration in deep rooms.

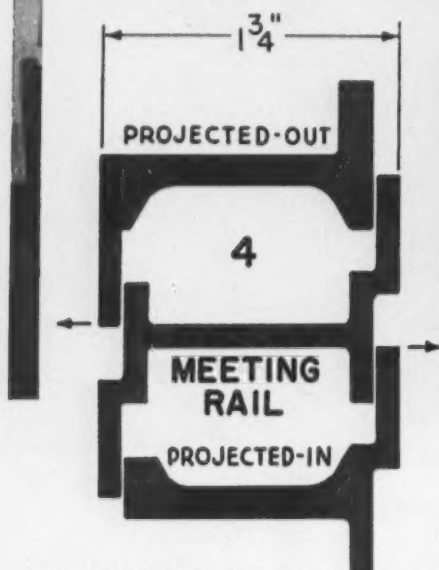


KIMBLE GLASS COMPANY

Toledo 1, Ohio—Subsidiary of Owens-Illinois Glass Company

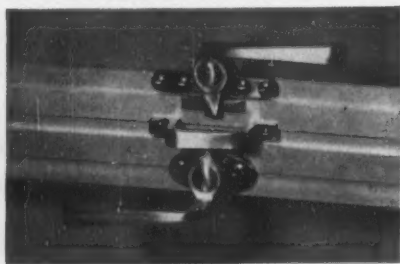
Where the *other* services also count—it's always BAYLEY WINDOWS

Two of the many important features of BAYLEY design

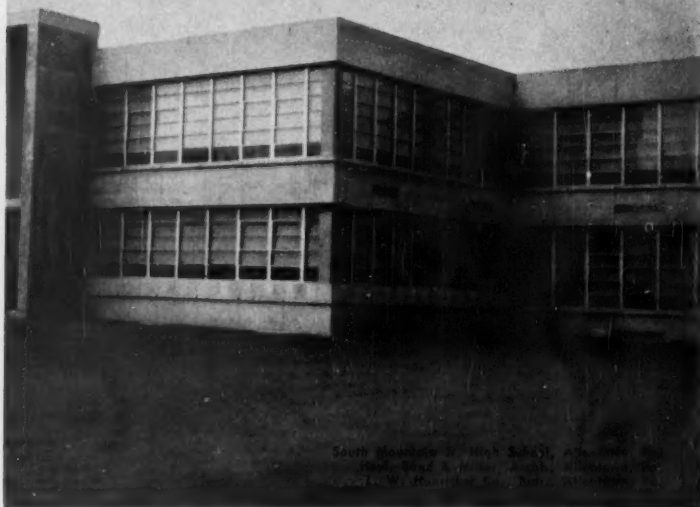


Extra Deep Sections: This full size section of the combined meeting rail and ventilator section (full $1\frac{3}{4}$ " horizontally and $2\frac{3}{4}$ " vertically) show how "Thermopane" or "Twindow" glazing can be accommodated. Also, ample room between ventilators and frame members is provided for substantial built-in hardware, such as ventilator shoes and limit arms.

Rugged White Bronze Hardware Sturdy, positive-acting handles fit neatly to the flat surface of the window and are securely mounted with grommets embedded in the section. No mechanical parts to become loose or require maintenance!



73 Years of RELIABILITY



Bayley Aluminum Projected Windows

Add Efficiency and Economy to Modern School Design

Bayley's ceaseless endeavor to better serve through all the building stages — from a school's inception to its occupancy — is further exemplified in the Bayley Aluminum Projected Window. In addition to carrying Bayley's "hallmark" of quality construction, it provides the design features that School Authorities have requested to be incorporated in a window for most efficient school use. A few of these features are:

Modern appearance • Economy — painting unnecessary • Permanence — long carefree life • Simplicity — no complicated mechanism • Adaptable to all types of construction • Glazing outside — flat surface inside • Easily washed from inside • Prepared for screens • Permits use of accessories, such as draperies, shades, curtains, venetian blinds or awnings.

These features — and still others — reflect Bayley's years of specialized window experience and recommend your discussing your needs, regardless of the requirement, with Bayley. Write or phone.

See Bayley in Sweet's. Complete catalogs on aluminum windows, 17a/BA; steel windows, 17b/BAL; Saf-T-Gard Hospital Detention Window, 17b/BAY.



THE WILLIAM BAYLEY COMPANY

Springfield, Ohio

District Sales Offices:

Springfield

Chicago 2

New York 17

Washington 16

The NATION'S SCHOOLS



maximum wear+minimum care=greatest economy

That's simple arithmetic. The product that lasts the longest with the least maintenance naturally saves the most money over the long pull. Now, see how flooring made of VINYLITE Brand Resins fits that formula.

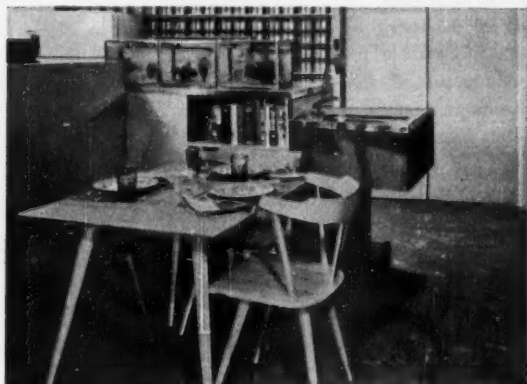
MAXIMUM WEAR! Flooring of VINYLITE Resins resists scuffing or staining. It's tough, yet resilient. It conforms to uneven sub-floors and movement without cracking. In rough service—schools, locker rooms, restaurants, business offices, factories—there are thousands of installations where millions of people's

rough steps just haven't been able to cause any noticeable wear.

MINIMUM CARE! VINYLITE Resin flooring is permanently-beautiful. Maintenance *has* to be easiest. Dirt just cannot penetrate its smooth non-porous finish. It merely rides on the surface and cleans with a swish. And, the surface withstands water, grease, soap, cleansers, chemicals and other agents found in hospitals . . . even acid and strong alkali solutions.

These advantages add up to one thing: take a stand on specifying and installing VINYLITE Resin flooring. You will be money ahead, year after year. VINYLITE Brand Resins are *made* to make better products . . . from flooring to hundreds of applications in defense and basic industry. Write Dept. QD-84 for a list of suppliers.

Photographs of Terraflex tile courtesy
Johns-Manville Corporation, 22 E. 40th St., New York 17, N. Y.



Vinylite
BRAND
RESINS
TRADE MARK

BAKELITE COMPANY, A Division of Union Carbide and Carbon Corporation UCC 30 East 42nd Street, New York 17, N. Y.

MAXIMUM EFFICIENCY WITH AMERICAN DESK'S

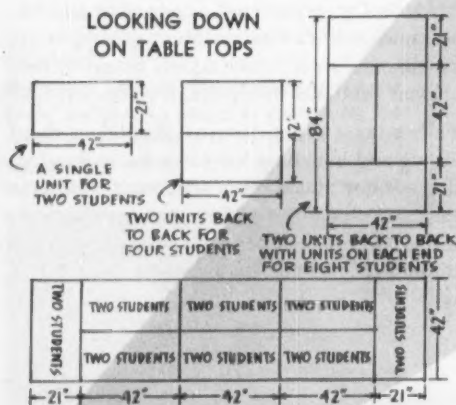
Airplane Table



Here is a desk unit that is gaining in classroom popularity through its great *Flexibility*. School after school has proclaimed how well this unit fits into all sizes, shapes and physical *Designs* of their various classrooms. It, of course, has been constructed with the famous American Desk combination of

Strength plus Beauty . . . spot-welded steel plus highly

finished tops. Note, too, that it is available with either angular or tubular steel legs.



- ★ **FLAT-TOP**
- ★ **FUNCTIONAL**
- ★ **FLEXIBLE**

Function and Flexibility is illustrated here, showing the many arrangements the Airplane Table may achieve. For the greatest efficiency in your classrooms, specify the Airplane Table to your American Desk Dealer.

American Desk

MANUFACTURING COMPANY



MANUFACTURERS OF PUBLIC SEATING ♦ ♦ ♦ Temple, Texas



SAFETY! Ford School Bus Safety Chassis are road-tested in every phase of performance. For example, a test on emergency braking and holding ability on hills is shown on the left. Here, a Ford School Bus descends a 30% grade in wintry weather. Ford Chassis undergo rigorous laboratory tests plus exhaustive road testing.

Tested and Proved!

These facts show why you can depend completely on the new Ford School Bus Safety Chassis



COMFORT! Springs, frame and axles receive a thorough testing at the Ford test track. On this stretch of cobblestone road, a Ford School Bus gets a far rougher "ride" than under most normal service conditions. Ford School Bus Chassis provide many comfort features, such as progressive-type, multi-rate rear springs.



RELIABILITY! This road test is made to show how well the Ford School Bus Safety Chassis stands up under extreme punishment. Every vital chassis part is built to far exceed the greatest calculated service stresses. For example, front axles can be twisted cold, five complete turns, without evidence of fracture.



ECONOMY! Famed Ford economy is no accident. Exact tests on fuel consumption, like the one at the left, show how little the Ford School Bus Chassis costs to run. There's a 4-engine choice to fit your power needs. There's gas-saving Power Pilot—and many other features designed to hold down your running costs.



COMPLETELY NEW Ford Safety Chassis are built to exceed every standard set by the National Education Association. They are tested and re-tested for fullest protection of your school children.

Ford gives you a choice of four all-new School Bus Series, three wheelbase lengths with four engines—V-8 or Six. You can match chassis and power unit for most economical handling of your particular pupil load.

Let your Ford Dealer show you the Safety Chassis that suits your particular needs. He can help you in the selection and purchase of the right school bus body, too.

MAIL THIS COUPON TODAY!

FREE FORD Division of FORD MOTOR CO.
P.O. Box 658, Dearborn, Mich.

Please send me your latest literature on the new Ford School Bus Safety Chassis for '53.

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B-2 Check here if student ☐



...if you want to see the heating element

You won't see any finned pipe heating element once you put in Dunham Baseboard. You know it's there, of course, by the way it performs.

But, once installed, Dunham Baseboard shows only straight, smooth, unbroken horizontal lines . . . no heating fins, no pipe, no piping connections are visible through air openings.

Dunham's unique, one-piece, smooth-surfaced front cover is easy to clean. Since it extends clear to the floor, there's no "cleaning under" problem, either.

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See how Dunham Baseboard fits into a wide variety of industrial, commercial, residential and institutional buildings. Complete data on materials, construction and capacities. For your free copy of Bulletin No. 639-D-15, write to C. A. Dunham Co., 400 W. Madison St., Chicago 6, Ill.



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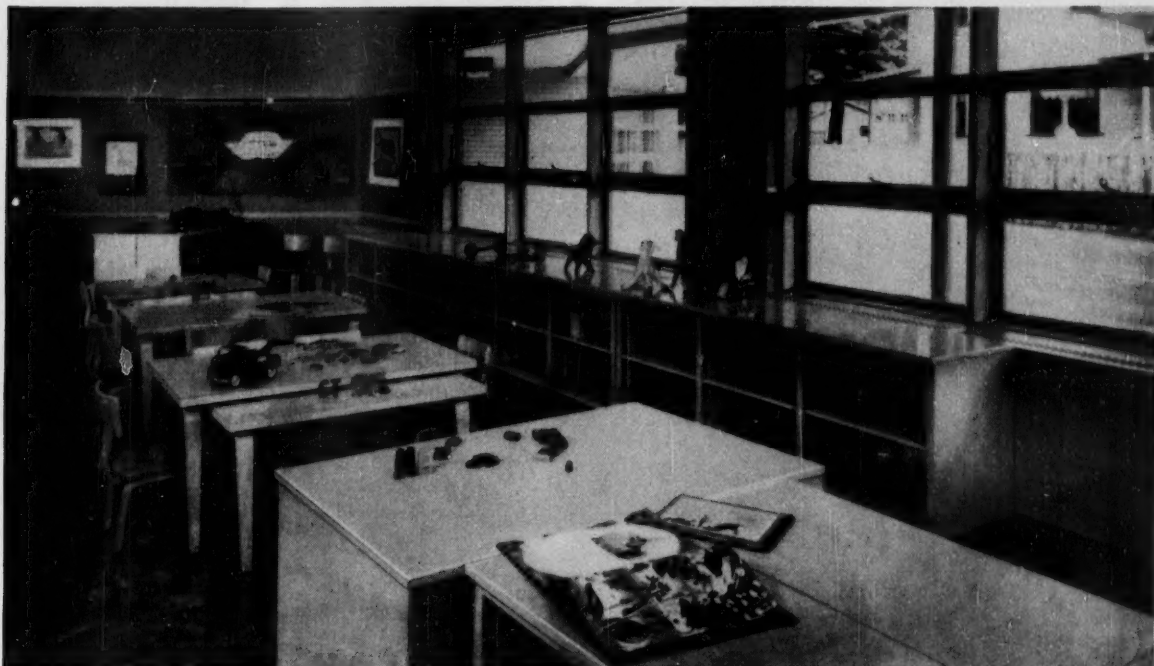


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Architect: Emil A. Schmidlin

it's student proof!

The gleaming MICARTA[®] plastic surfaces in this modern schoolroom of the Stockton School, East Orange, N. J. will last through whole generations of students. On desk tops, tables, cabinets, wainscoting, in fact, wherever the rough-and-tumble of classroom wear is a real maintenance problem, MICARTA is the ideal answer.

Amazingly tough, long-wearing MICARTA is immune to doodling, ink, scuffs, knocks and all the other hazards peculiar to classrooms. Here is a surface that never needs waxing, refinishing or maintenance of any kind. It can be cleaned to a gleam with a wipe of a damp cloth.

Count on MICARTA for brighter, more efficient school surroundings. This hard-working material comes in a wide variety of colors, patterns and wood grains. Look into MICARTA's long-range economy today.

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Please send full information on MICARTA
and its applications.

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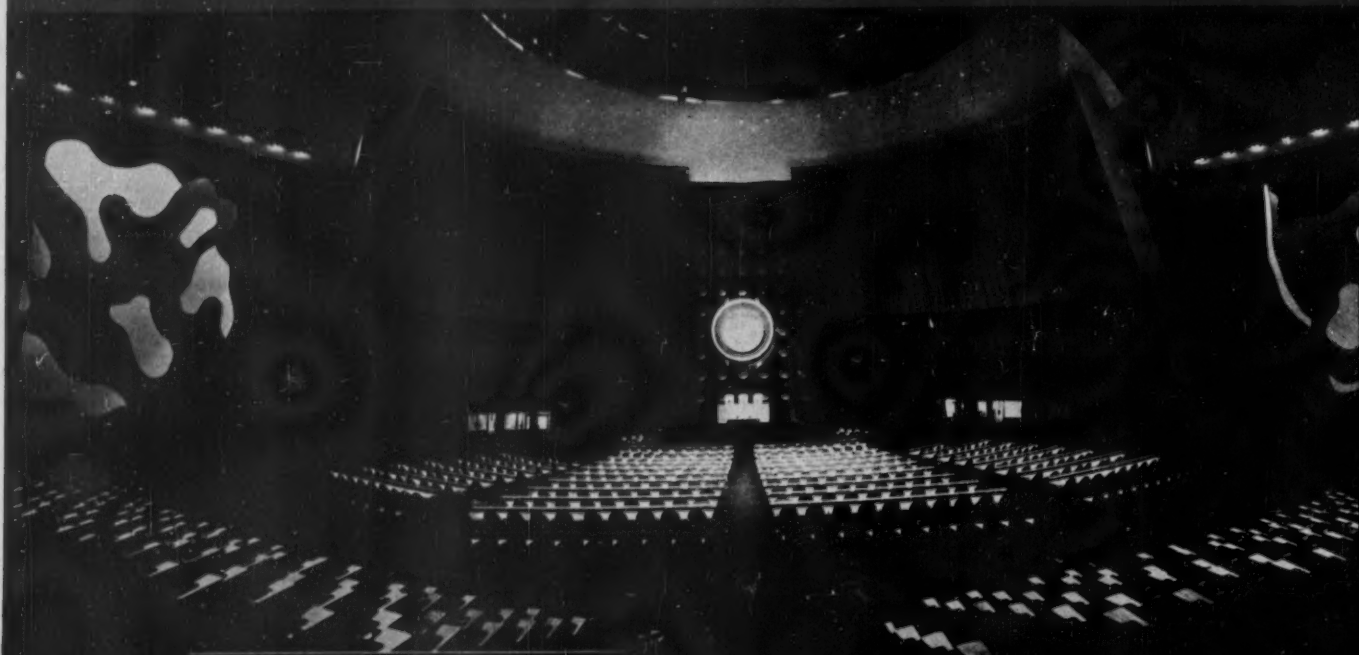
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UNITED NATIONS



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Air Conditioned comfort is assured by **POWERS CONTROL**
Seating Capacity: 2000 Delegates, Visitors, Press, Radio, TV
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In addition to the main hall and council chambers Powers control is used for the many tiers of glass booths occupied by the press, radio, TV and translators; also lounges, restaurants, bars, library, radio studios and garage. There is also considerable control for wall and panel heating and snow melting.



THE POWERS REGULATOR CO.

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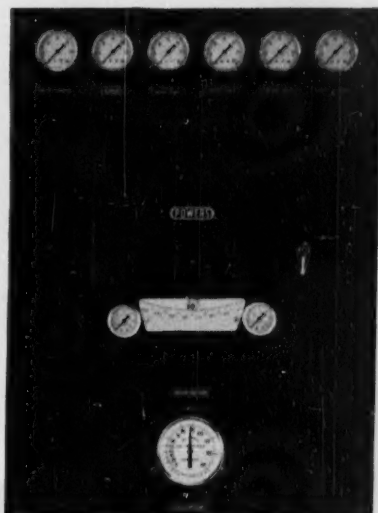
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IN this famous international forum the engineers have succeeded in supplying optimum atmospheric environment for peaceful discussions which may help bring about a better world.

Many meeting and conference rooms and other spaces are individually controlled by Powers pneumatic thermostats. Dry bulb temperatures are set at the control panel with a Powers Series 100 Indicating Controller. Outside air is used for cooling during the intermediate season. Relative humidity is controlled during all seasons of the year. The seasonal changeover to summer, intermediate or winter is made with switches in the central control room.

Experience gained by Powers here and in many other important large and small buildings may be helpful to you. Next time a temperature or humidity control problem arises, contact POWERS nearest office. There's no obligation.

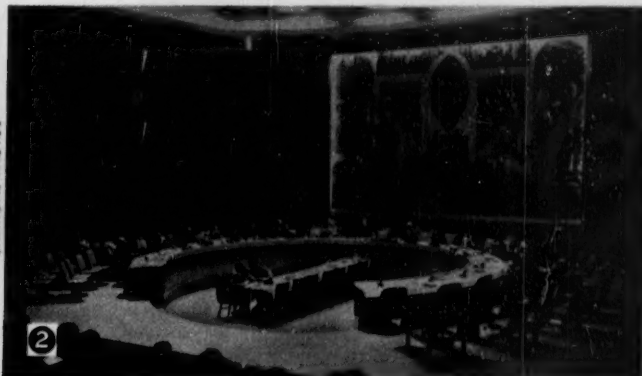


Over 70 Powers Control Panels for as many complete air conditioning systems are used at UN. Gauges on each panel indicate the position of controls.

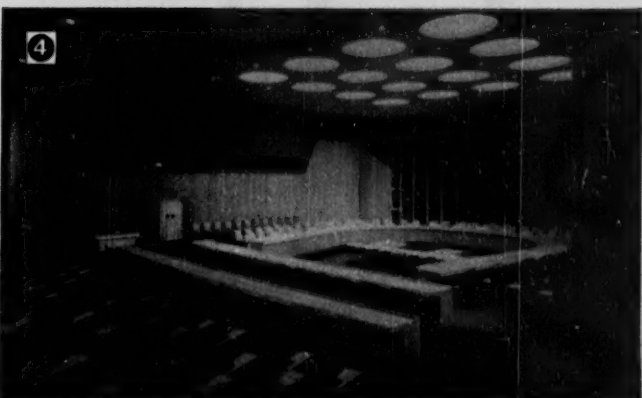
PHOTOS BELOW: (1) Translators in Air Conditioned Glass Booths (2) Security Council Chamber (3) Trusteeship Council Chamber (4) Economic and Social Council Chamber.



UNATIONS PHOTOS



ESRA STOLLER PHOTOS



in 1853

When Franklin Pierce was President of the United States, Thonet established offices in New York to introduce Bentwood chairs in America.

From the first Bentwood chair which was invented by Michael Thonet in 1830, to today's laminated bentply designs, Thonet's name has become synonymous with good chairmaking.

The first Bentwood chair, made of laminated veneers, was the forerunner of today's laminated bentply.



A HUNDRED YEARS OF PROGRESS

in 1953

Millions of Thonet chairs throughout the United States give comfort, service and satisfaction to their users. Time-honored by its long history of success, Thonet looks forward to another century of outstanding progress.



Today's laminated bentply chair 1302.

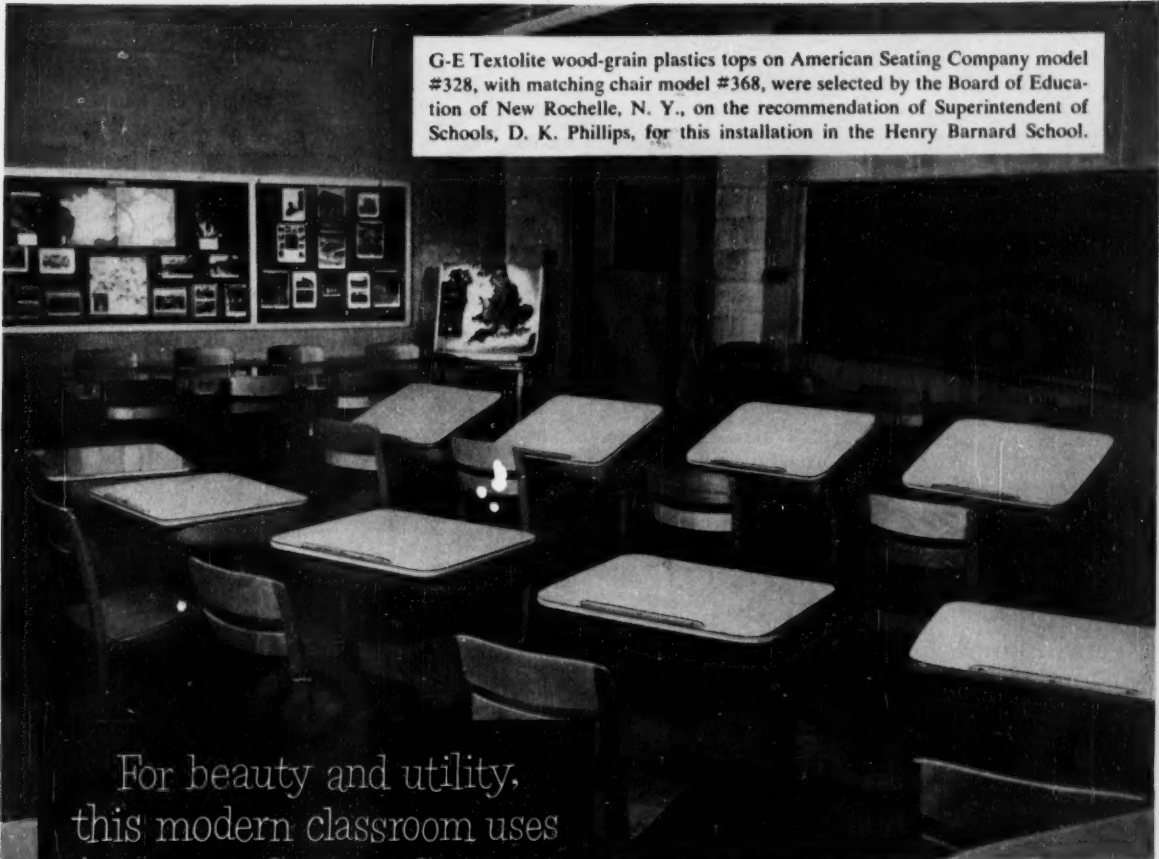


Choose from Thonet's large selection of furniture designs. Write for brochure illustrating the furniture you need. Dept. G5
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Visit our beautifully redecorated New York Show Room at
ONE PARK AVENUE

Other Show Rooms:
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G-E Textolite wood-grain plastics tops on American Seating Company model #328, with matching chair model #368, were selected by the Board of Education of New Rochelle, N. Y., on the recommendation of Superintendent of Schools, D. K. Phillips, for this installation in the Henry Barnard School.

For beauty and utility,
this modern classroom uses
American Seating Company
tables with
G-E TEXTOLITE* TOPS

*Reg. U. S. Pat. Off.

On the recommendation of Mr. Donald K. Phillips, Superintendent of Schools, the Board of Education in New Rochelle, N. Y., selected American Seating Company desks topped with G-E Textolite plastics surfacing. With a combination like that, you can count on school tables that retain their good looks and practical finish under normal use for years to come.

When it comes to plastics surfacing, G-E Textolite offers you many important features:

- **Rugged Durability** that resists stains, scratches, and hard knocks.
- **Proper Light Reflectance** through a finish especially designed to reduce eyestrain.
- **Good Looks.** You have a wide variety of patterns to select from—all modern and distinctively styled.
- **Reduced Maintenance.** G-E Textolite is easy to clean and requires no repainting or refinishing.

Many schools are finding G-E Textolite plastics surfacing ideal for other installations, too. Consider it, for example, on workroom tables, laboratory counters, washroom sink tops, school cafeterias—and wherever else you want beauty plus extreme durability.

For school improvement ideas with G-E Textolite tops, contact your nearest G-E Textolite distributor, or write: General Electric Co., Section 322-2A, Chemical Division, Pittsfield, Massachusetts.

*Reg. U. S. Pat. Off.

You can put your confidence in—

GENERAL  ELECTRIC



Full Cash Refund!

... if Sylvania Fluorescent Lamps don't give you best all-around performance

Try 24 Sylvania Fluorescent Lamps of any popular type. If they don't give more light and maintain color and brightness for a longer time than any other brand, send them back with your signed Certificate of Assurance and your money will be refunded.



School Authorities: Sylvania completely guarantees every fluorescent fixture ... including every Sylvania lamp and part for an entire year. See your nearest Sylvania representative.

SYLVANIA

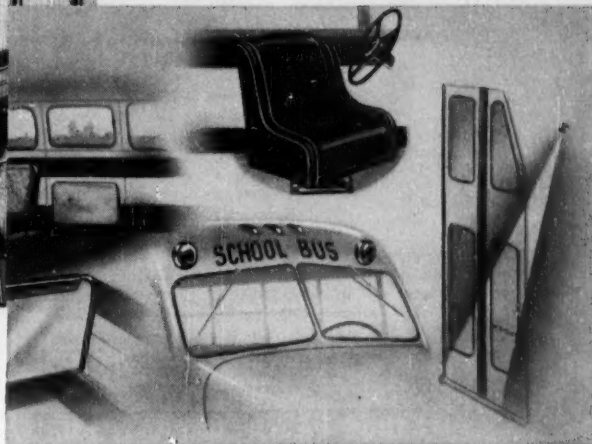
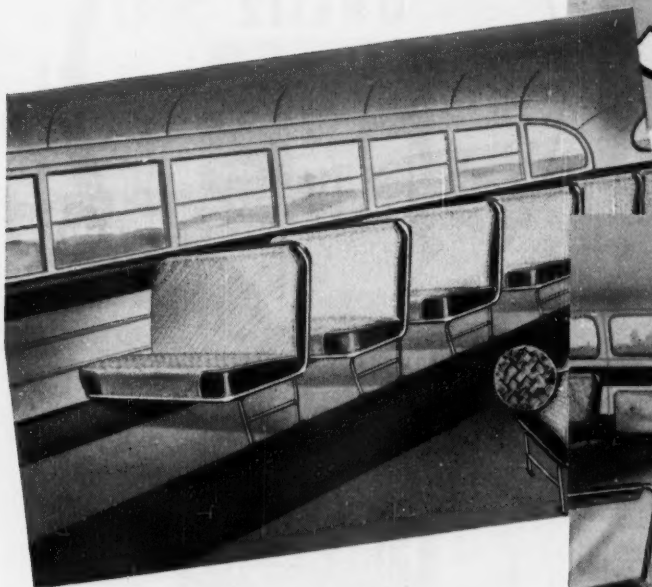
Sylvania Electric Products Inc. 1740 Broadway, New York 19, N. Y.

LIGHTING • RADIO • ELECTRONICS • TELEVISION

In Canada: Sylvania Electric (Canada) Ltd., University Tower Bldg., St. Catherine St., Montreal, P. Q.

MORE SAFETY

5WAYS



with

Oneida

"COLOR-COMFORT" INTERIORS

New "Color-Comfort" interiors in sparkling shades of green with cream piping stay new-looking for years—but that's not all! Check these safety advantages:

- **THE ONEIDA SAFETY CRASH PAD.** This Crash Pad is contoured to blend perfectly with interior trim—yet assures plenty of extra protection if the necessity for a sudden stop should arise. (Optional equipment at extra cost)
- **"HIGH-AND-LOW" VISION REAR DOOR.** Wide, foolproof emergency door offers unexcelled visibility when parking, backing up, or in tight spaces. (Optional at extra cost)
- **ONEIDA "COMFORT-DRIVE" SEAT.** Driver comfort and visibility are vital safety factors. That's why the "Comfort-Drive" seat adjusts 4 ways . . . up, down, backward,

forward for maximum visibility. (Optional at extra cost)

- **ONEIDA "SAFE-VUE" ENTRANCE DOOR.** This door assures extra safety for children. The driver has an unobstructed view of the roadside and waiting passengers. Wide two-step entrance permits easy entrance and exit. Vertical edges of doors have soft, rubber seals to protect fingers.
- **BIG WINDSHIELD AREA FOR GREATER SAFETY.** Windshield styling reduces reflection and glare; increases visibility. Narrow pillar assures maximum vision in any weather. Tinted glass (optional at extra cost) cuts driver fatigue.

To convince yourself, send for new, colorful brochure on "Color-Comfort" Safety Interiors. Mail coupon today!

"SETTING QUALITY STANDARDS FOR THE INDUSTRY"



ONEIDA PRODUCTS CORPORATION

SALES DIVISION
CANASTOTA, NEW YORK

SEND FOR THE FACTS TODAY!

Oneida Products Corporation
Sales Division
Canastota, New York

NB-5-58

Please send me full details on new Oneida "Color-Comfort" Interiors.

Name _____

Address _____

City _____ Zone _____ State _____

When the Hand is Quicker
Than the Eye



Eyes wander and unrelated thoughts destroy student attention when chalkboard glare occurs.

For as little as 3c per square foot Endur Chalkboard Resurfacer can maintain the correlation between your class attention and grades.

Endur Chalkboard Resurfacer offers two color choices — Standard 2-24 and Special 2-20 Dark Green. Easily applied — brush, roller or spray. Endur Chalkboard Resurfacer will retain chalkbite for the next ten years without chipping, cracking or peeling.

Ask your nearest school supply dealer now or write us for information.

Member N.S.S.I.

ENDUR PAINT COMPANY, INC.

75 North Street, Salem, Mass.



SUPERIOR SCHOOL FURNITURE

Construction of selected Appalachian kiln-dried Beech. Desk units with mortise and pegged tenon; chairs with spiral-grooved dowels and rigidly glued corner blocks. In Natural, Warmtone, or School Brown. Line also includes Movable Chair Desks, Tables, and Tablet Arm Chairs.

Write for name of authorized distributor in your state.

WILLIAMS & BROWER, Incorporated
SILER CITY • NORTH CAROLINA

on
American Desk
MANUFACTURING COMPANY

ONE-12

of course
it's
FIBERESIN

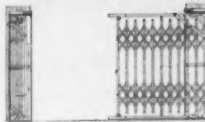
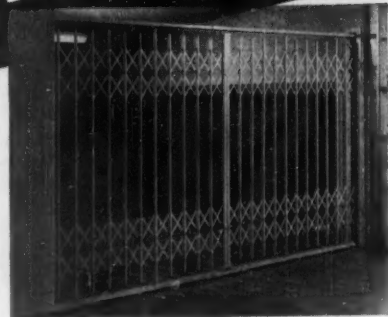
Leading MANUFACTURERS
CHOOSE the BEST because
they KNOW the BEST . . .
FIBERESIN Desk Tops.

Send for details.



Day and Night, More Schools Rely On

Acorn folding gates

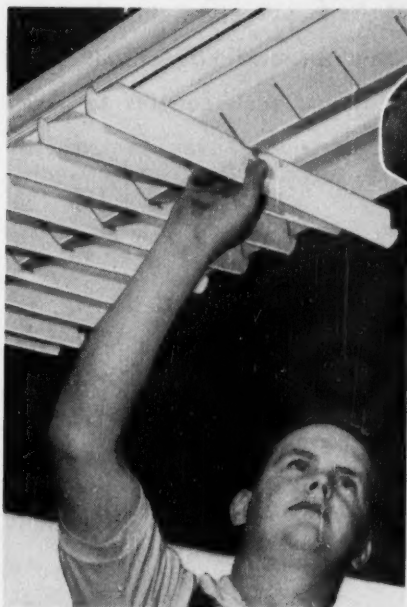
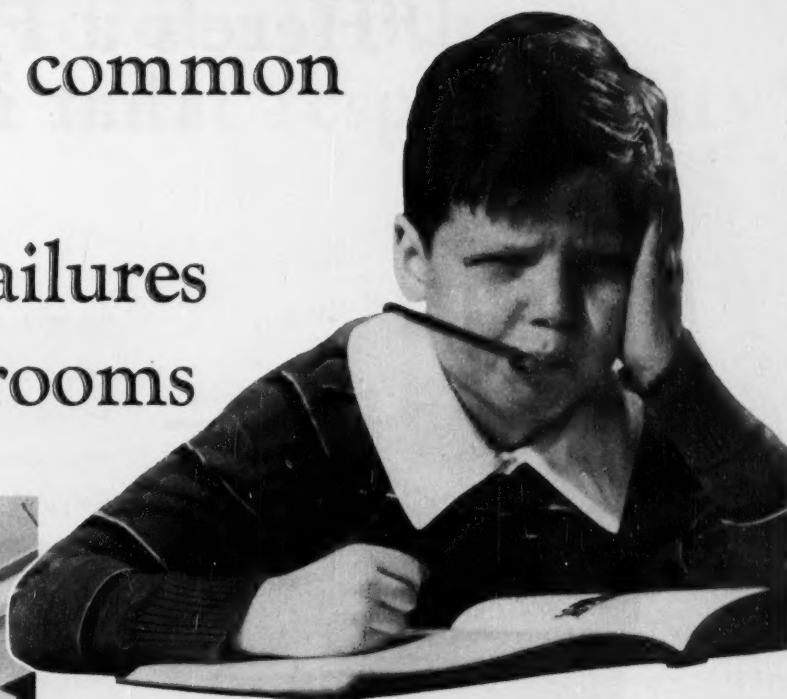


(Illustrated above) Acorn "in-a-wall" folding gate unit. Diagram shows half of unit compactly folded into wall cabinet.

Impersonal, architecturally correct, ACORN "in-a-wall" Folding Gates keep evening crowds neatly channeled into auditorium or gymnasium, away from unused classrooms. The evening over-gates fold into small flush cabinets. No fuss, no bother! Complete, dignified security! An ACORN gate for any requirement. See Sweet's Architectural File, or write for new catalog TODAY.

Acorn Wire and Iron Works
5912 South Lowe Avenue, Chicago 21, Illinois

The most common cause of lighting failures in schoolrooms



ONE HAND DOES IT! Simple finger pressure unlocks each feather-light louver blade separately. One quick wiping action with damp cloth cleans both sides simultaneously. Removal of blades exposes inside reflector surfaces for easy cleaning. Fixture shown here cleaned in 3 minutes instead of the 30 minutes for conventional fixture.

If you choose a conventional louvered luminaire for your new school building—or for better lighting of an old one—it will resemble in outward appearance the fixture you see below. Fluorescent lamps, boxed in an arrangement of reflector planes and louver blades, *white* and *shiny*, will be its source of light.

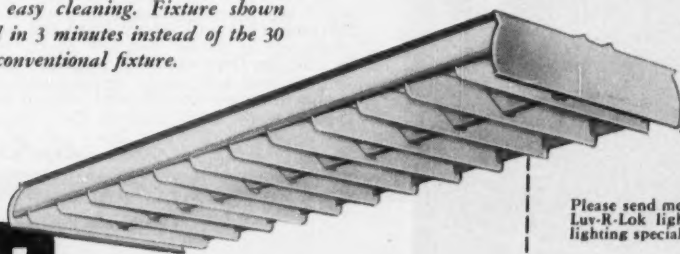
But the luminaire shown below—the LPI Luv-R-Lok—only looks like the conventional louvered fixture. The Luv-R-Lok, you see, is the possessor of an *exclusive* feature (patent pending) that completely overcomes the most common cause of lighting failures.

Any louvered fixture quickly loses its original efficiency unless its reflector planes and blades

STAY white and shiny. Unless it is cleaned thoroughly once a year, the inevitable result is an average loss of 50% in foot candles—and half-lighted classrooms. Unfortunately, the conventional louvered fixture, like Venetian blinds, is so hard and costly to clean that otherwise good installations are allowed to gather dust and grime year after year.

The LPI Luv-R-Lok solves the problem with *removable* louvers, as pictured and described at left. Many schools now have Luv-R-Lok installations. They find that what would ordinarily be a ten-day cleaning job now requires only a single day.

Investigate the Luv-R-Lok now. WRITE us for full data and the name and address of the LPI lighting specialist in your community. Lighting Products, Inc. Highland Park, Illinois.



LPI *Luv-R-Lok*

Lighting Products, Inc., Dept. NS,
Highland Park, Illinois

Please send me, without cost or obligation, full data on Luv-R-Lok lighting fixtures and name of nearest LPI lighting specialist.

My Name _____

Position _____

School _____

Address _____

City _____ Zone _____ State _____

"Here's a Fry Kettle that its release



"IT IS A GREAT RESPONSIBILITY when millions of dollars' worth of existing equipment is rendered out of date by a revolutionary new product such as this Hotpoint Mark 313 Fry Kettle. Yet we accept this responsibility proudly because it brings such benefits to food service everywhere—even in kitchens where it will now be advisable to replace fry kettles bought recently."

Arvin E. Wolf
Vice President

"A product that pays for itself by giving our customers bigger production at lower cost—as the new Hotpoint Mark 313 Fry Kettle does—justifies its introduction many times over."

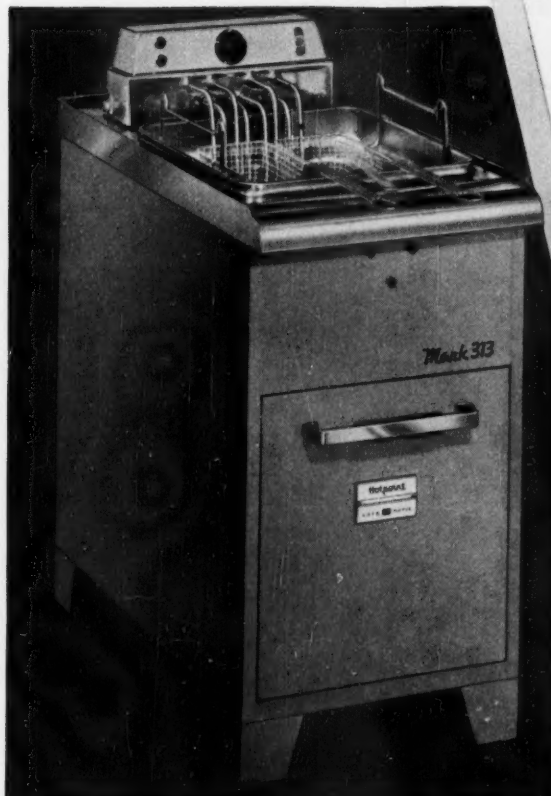
Walter Schumacher
Sales Manager
Commercial Equipment Department

"We are confident that our fellow engineers in related fields will understand the pride we feel in a design that so nearly approaches perfection—the ultimate in efficient use of electricity."

H. Michaels
Chief Engineer
Commercial Equipment Department

Your equipment may be "new," but it's not modern unless it's—

so far ahead of all others
becomes a great responsibility"



*Mark 313 means 313 2-oz. servings of potatoes hourly from just 28 pounds of fat.

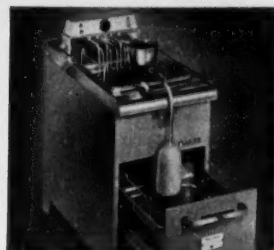
ALMOST UNBELIEVABLE, isn't it? Yet, with a fat-capacity of only 28 lbs. Hotpoint's new *Mark 313* Fry Kettle actually produces... start to finish... 313 big 2-ounce servings of french fries per hour! Can save you up to \$489.50 in fat-costs yearly if you change fat every 10 days.

93% efficiency (twice that of the average kettle) and new extra high-powered Calrod heating units that can preheat 28 pounds of fat from 75° to 375° in a record 5 minutes make this possible.

Your present Fry Kettle cannot possibly equal this *Mark 313*—nor come anywhere near doing so—even in many cases where present equipment is double or three times the size! You owe it to yourself to investigate the *Mark 313* at once!

**World's fastest
fat cleaning system!**

Miraclean system semi-automatically drains all fat from fat container. In less than 5 minutes, fat is cleaned and strained into in-a-drawer spare fat container. Lift out spare container and put into use immediately.



Cleaning is so easy! →

Swing Calrod® immersion heating unit out of fat to upright position. Lift out fat compartment, carry to the sink, and wash like an ordinary cooking pan — in less than 5 minutes.



ONLY THE MARK 313 FRY KETTLE—
turns out 313 large 2-oz. servings of french fries per hour in 28 lbs. of fat!
Only with the *Mark 313* can you drain and strain the fat, make a complete fat changeover, clean the kettle completely—all in less than 10 minutes!



Hotpoint
HOTPOINT CO., A DIVISION OF
GENERAL ELECTRIC COMPANY
ALL-ELECTRIC *Commercial Cooking*

HOTPOINT CO., Commercial Equipment Dept.
231 South Seeley Avenue, Chicago 12, Ill.

- ☐ Please send us full information on Hotpoint Mark 313 Fry Kettle.
- ☐ Please send a representative to demonstrate and explain Hotpoint Mark 313 Fry Kettle.

NAME _____

ADDRESS _____

CITY _____ COUNTY _____ STATE _____

The High School Problem

Today, a new high school must be planned and equipped to recognize the advancements in secondary educational practices and the school's community obligations. Four examples of how the nation's architects are meeting this challenge are here, in your

school progress report from Honeywell



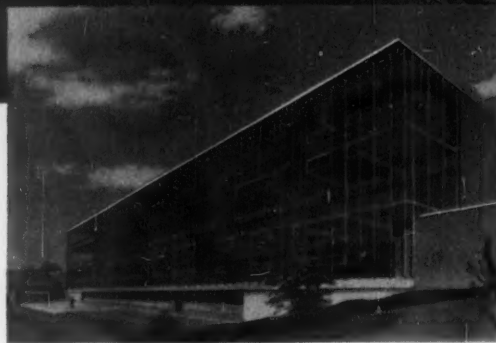
New Iowa school embodies significant departures in secondary school design

The plan of Keokuk's striking new Senior High School-Community College is attracting much attention! Its advanced design combines complete facilities for a modern high school, a fine community meeting place as well as provision for future expansion. The architects, following the campus concept, allotted facilities in four connected buildings: academic, industrial arts, administrative-community, and a gymnasium.

A fine cafeteria-auditorium will be a most practical means of providing facilities for community affairs.

Non-load-bearing concrete block partitions will be used between classrooms. They may be moved at low cost when expansion becomes necessary.

Architects-Engineer: Perkins & Will, Chicago
Mechanical Engineer: E. R. Gritschke, Chicago
General Contractor: Lovejoy Construction Co., Des Moines
Mechanical Contractor: Sid Smith & Company, Waterloo

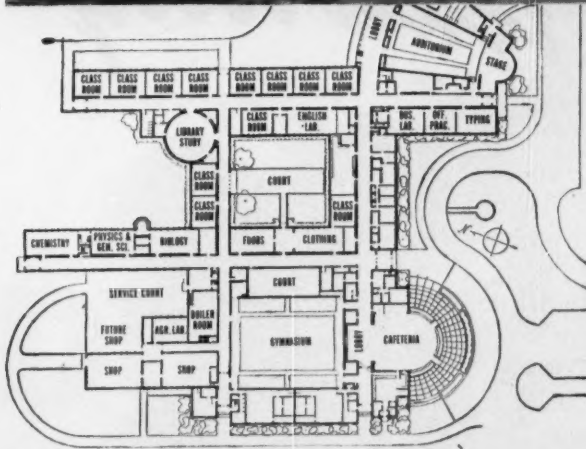


"Daylighting" design benefits corridors and classrooms

The south wall (above) of the academic building consists of beautiful, glass-walled corridors—which afford a spectacular view of the Mississippi River.

All classrooms face north, along the opposite wall, for ideal "daylighting." Additional daylight is "borrowed" from the sun-flooded corridors via inner wall strip windows. Inner rooms, like the library, get daylight from unique "sundomes" on the roof.

To complete the wonderful educational environment, each classroom will have Honeywell Individual Room Temperature Control. This insures constant comfort regardless of widespread use of glass. Honeywell Day-Night automatic controls will also be installed for fuel economy.



Well-planned new Junior High School completed in Tulsa

Citizens in Tulsa can point with pride to their new Alexander Graham Bell Junior High School. The public supported the entire cost of construction by floating a new bond issue—approved in a special bond election.

All facilities for academic, industrial arts and athletic events are included in the long "T" shaped building. Classrooms and corridors are bright and cheery. The gym and auditorium, available for community functions, are conveniently located at one end so classrooms will not be affected by noise and traffic common to this area.

Temperature and ventilation in the entire building are regulated by a modern Honeywell Control System, specifically designed for this school's requirements and including thermostatic control for each individual classroom.

Architects: Black and West, Tulsa
General Contractor: W. R. Grimshaw Co., Tulsa
Mechanical Contractor: Bearden Plumbing Co., Tulsa

MINNEAPOLIS Honeywell



First in Controls

How new Connecticut school benefits from excellent architectural planning

Children in Chester, Deep River and the Essex areas of Connecticut are now educated in Regional High School No. 4—one of the nation's most modernly designed and equipped high schools.

Wonderful community facilities are included. The gym, cafeteria, health unit, administrative area, art department and auditorium are all easily accessible for public use. The building is designed so it may be easily expanded.

The ingenious floor plan (at left) shows how courts and cross corridors divide traffic into alternate routes to avoid congestion. Related departments are located together to further reduce traffic.

The problem of temperature control was solved by dividing the building into four zones, providing each with its own Honeywell system. In addition, each classroom has Honeywell Individual Room Temperature Control for the ultimate in comfort. Economical Day-Night Honeywell Thermostats were specified to save fuel.

Architect: Ernest Sibley, West Hartford
Mechanical Engineer: Paul D. Harrigan, New Haven
General Contractor: Associated Construction Co., Hartford
Heating Contractor: Marine Plumbing & Heating Co., Middletown



Senior High School, Pasco, Washington, serves dual purpose in community

Pasco recently filled the need for a new high school and a community auditorium with this modern school.

The well designed building houses 50 classrooms, a vocational shop, cafeteria, library, gym, and a modern auditorium that can be used for various community activities.

In keeping with the high standards set for the project, Honeywell Individual Room Temperature Control was used in all classrooms. The completely air-conditioned auditorium is controlled by a separate Honeywell System, which was carefully engineered to regulate accurately heating, cooling and humidity.

Architects: Wulff, Bishop & Ritter, Spokane
Engineers: Kendall M. Wood, Joseph Doyle, Spokane
Contractors: Warren, Little & Lund, Walter G. Meyers & Son, Spokane

For additional information on control systems for schools call one of the 104 Honeywell offices, located in key cities from coast to coast. Or write Minneapolis-Honeywell, Dept. NS-5-94, Minneapolis 8, Minn.

engineered

Flexibility

- Attractive modern design
large roomy bookbox (18" x 24")
strong pressed steel pedestals
solid northern hard maple top
available with lifting lid bookbox.
- Ideal for classrooms and libraries
heavy birch plywood bonded with hard maple
available with large book compartments
table top and heights sized for
every need—kindergarten thru college.
- Typing table with strong
pressed steel pedestals
solid northern hard maple top (18" x 30")
standard table height 27".
- Especially designed for bookkeeping classes
large book compartment for practice sets
solid northern hard maple top (22" x 32")
standard table height 29".
- Swivel chair with 3" height adjustment
comfortable saddled seat
posture forming movable back
available with casters.



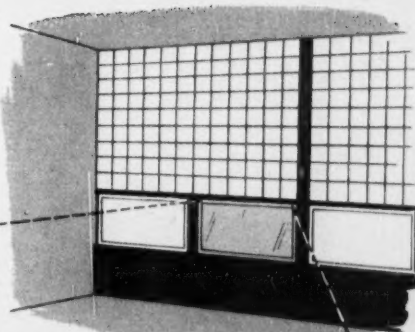
"Celsyn" finish resists
marring and scratching.
Engineered color
harmony "Suntan."

"No One Ever Regretted Buying Quality"

PEABODY

NORTH MANCHESTER, INDIANA

Brand new!



DUSKLITE

**... a special glass for vision strips
used with PC Glass Block panels**

Most school officials agree that panels of PC Functional Glass Blocks provide the ultimate in natural lighting for classrooms. It has been common practice for many architects to use them with clear-glazed vision areas because people usually want to see out. But shading devices commonly used to overcome the high brightness levels through these areas blocked the vision the architect was trying to provide.

Now, however, Dusklite, a completely new laminated safety glass developed and manufactured by Pittsburgh Plate Glass Company, provides the brightness control needed for these areas *without* blocking the vision. Thus,

the need for expensive, high-maintenance blinds, shades or louvers is eliminated.

Dusklite is neutral grey with a visible light transmittance of about 25%. It is available in $\frac{1}{8}$ " thickness and in sizes up to 15 square feet. Color perception through it is excellent.

If you send the coupon, we'll be glad to tell you how PC Glass Block panels combined with Dusklite vision strips can improve daylighting and save money.

**Pittsburgh Corning
Corporation**

PITTSBURGH 22, PA.



Pittsburgh Corning Corporation
Dept. 530, Pittsburgh 22, Pa.

Please tell me more about Dusklite and its use with PC Functional Glass Block Panels.

Name Title

School System

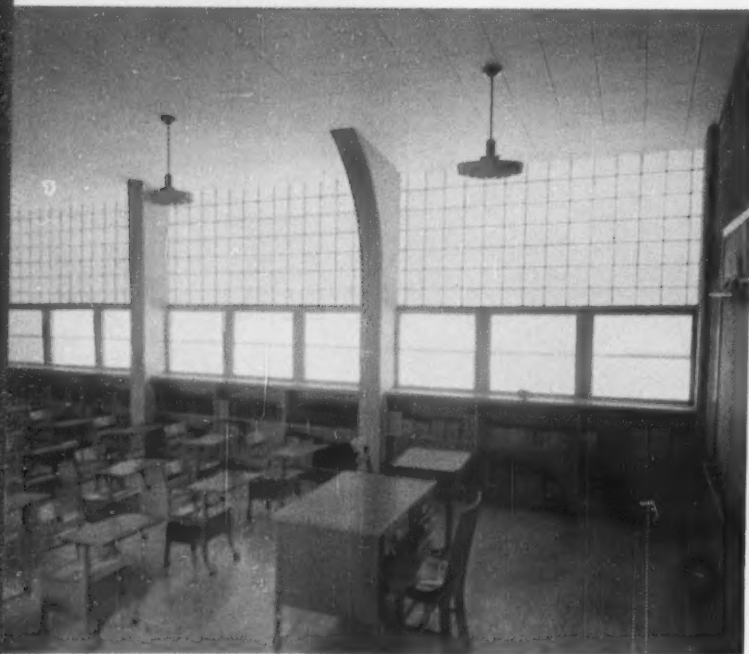
Address

City Zone ... State

"Soft daylight on every single desk, thanks to these PC Glass Blocks"



says **Rex Bell**, Superintendent, Gadsden Independent Schools, Anthony, New Mexico



● In Mr. Bell's own words, "Light meter tests have shown that the sides of the classrooms *away* from the PC Glass Block panels receive almost as much light as the areas *next* to the panels. We need electrical illumination only on the half-dozen or so days a year when the sky is completely overcast."

But, after La Union School was completed, it was found that PC Glass Blocks paid dividends in *other* ways beside light control. Mr. Bell: "Compared to clear glass areas, they have reduced operating costs considerably."

"Heating and air conditioning costs are low because the PC Glass Blocks have more insulating value than

single-glazed windows. Cleaning costs are negligible. Also, this beautiful building was erected at less than \$9.50 per square foot. We feel that the use of PC Glass Blocks was a contributing factor to this low figure."

Pittsburgh Corning manufactures a *complete* line of functional glass blocks. Special patterns are available for sunlighted and northern exposures; to be installed above or below eye level. *Skylight* panels can be installed in the ceiling using the new "Skytrol" block.

For more information on the easiest, most economical way to provide the *right* kind of daylighting for young eyes, send in the coupon.

Pittsburgh Corning Corporation

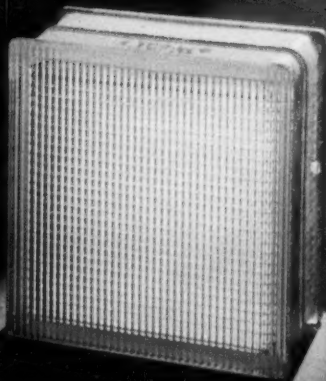
PITTSBURGH 22, PA.



Architect: Truman J. Mathews, A. I. A., Santa Fe, N. M.
 Consulting Engineers: Davis & Foster, El Paso, Texas
 General Contractors: Gilchrist Construction Co., Las Cruces, N. M.

Here's what you get with PC Glass Blocks

- **BETTER LIGHT**—a wide range of patterns for every school lighting need . . .
- **LOWER MAINTENANCE**—window maintenance minimized leaving custodian free for other duties . . .
- **LOWER HEATING COSTS**—PC Glass Block panels have more than twice the insulating value of single-glazed windows . . .
- **LESS DISTRACTION**—sound reduction factor helps check outside noises . . . less distraction for students and teachers . . .
- **IMPROVED APPEARANCE**—PC Glass Block panels impart clean architectural lines to any school—new or old.



Pittsburgh Corning Corporation
 Dept. AK-53, Pittsburgh 22, Pa.

Please send me a **FREE** copy of your booklet on the use of PC Glass Blocks in schools and other public buildings.

- ☐ Have engineer call to discuss specific problem.
☐ Send information on "Skytrol" blocks for skylights.

Name Title
 School System
 Address
 City Zone State

SKIL

Belt Sanders serve double purpose!



...for vocational training classes
...for building maintenance

What is more natural than to train students with the belt sander they will use as professionals! SKIL Belt Sanders produce faster work, finer workmanship. They are *school-and-job-proved* to give perfectly smooth finishes on all materials, whether wood, metal or composition.

SKIL Belt Sanders are designed for ease of handling and long life. In maintenance, they excel in refinishing cabinets, desks, blackboards and other school fittings. Cutting out tedious time-consuming hand labor, these SKIL Belt Sanders pay for themselves with the money they save.

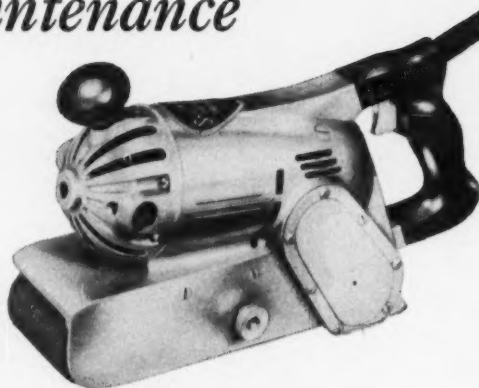
**FOR COMPLETE INFORMATION, CONTACT YOUR
SKIL DISTRIBUTOR, OR WRITE DIRECT**

SKIL Products are made only by SKIL Corporation
formerly SKILSAW, Inc.

5033 Elston Avenue, Chicago 30, Illinois

SKIL Factory Branches in 34 Principal Cities
In Canada: Skilltools, Ltd.

3601 Dundas Street West, Toronto 9, Ont.

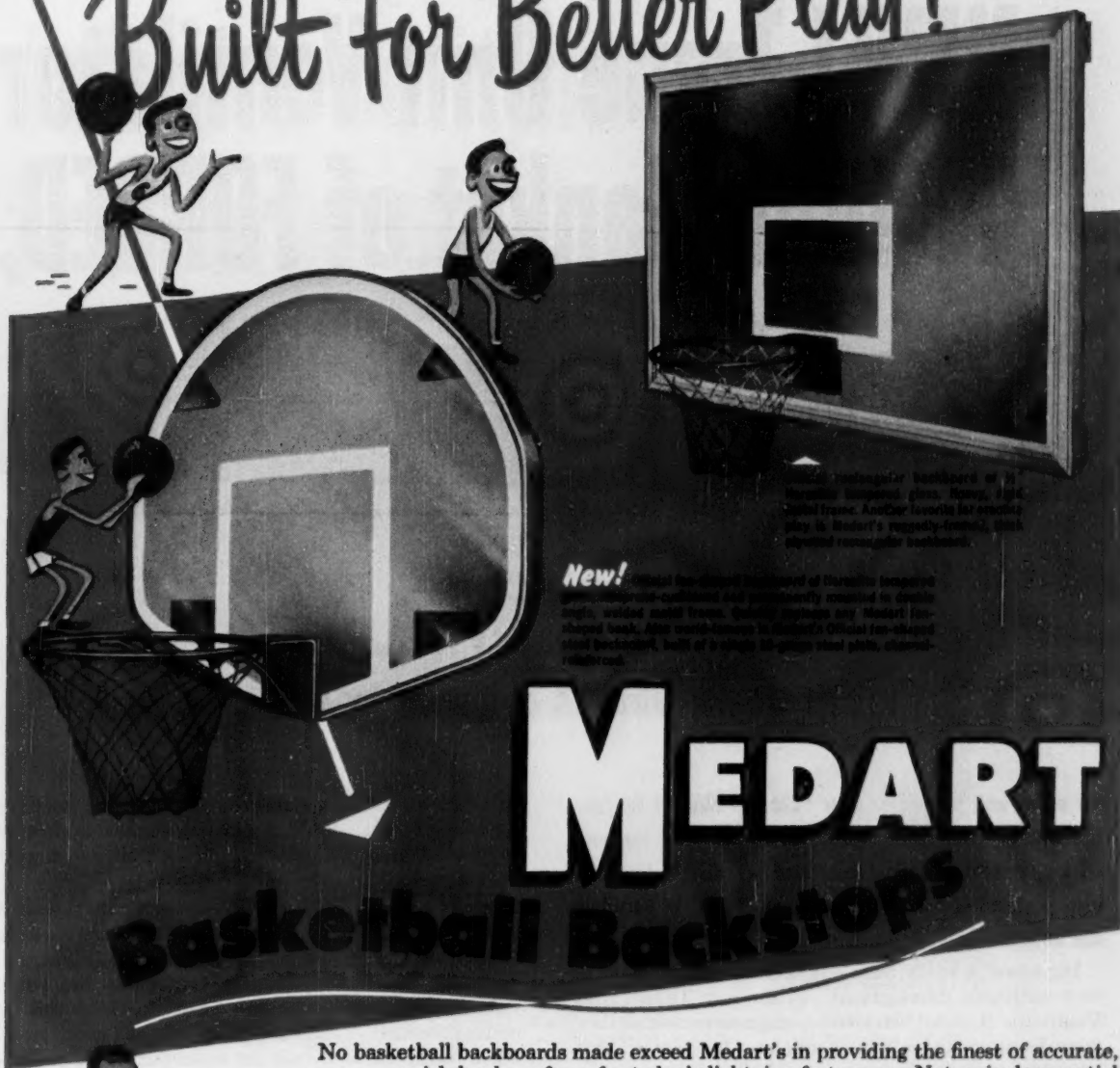


SKIL Belt Sander—Model 448—3" belt.
Weights 15¾ lbs. Size: 4¼" wide x 15¼" long
x 8½" high. Belt speed: 1200 ft. per minute.
Four other models, smaller and larger capacity;
also with vacuum attachment.

SKIL

PORTABLE TOOLS

Built For Better Play!



New! Medart's new design basketball backstop of the quality temperate glass, welded metal frame, and specially treated in double back, welded metal frame. Another feature for easier play is Medart's specially-treated, shock absorbed rectangular backboard.

MEDART

Basketball Backstops

No basketball backboards made exceed Medart's in providing the finest of accurate, quick-bank surfaces for today's lightning-fast games. Not a single essential quality contributing to greater strength, vibration-free rigidity and long durability is overlooked. Every one conforms with all the standards of the National Basketball Committee. Whether made of steel, wood or glass, they will never distort, splinter, buckle or warp.

But supplying these better backboards for better play is only one phase of the responsibility Medart assumes. Experienced engineers analyze structural conditions, practice and play requirements, and many other related factors including budget limitations, to insure properly installed, thoroughly satisfactory "Tailored-To-The-Job" equipment.

It is wise to consult Medart on every backstop matter involving either new building, remodeling or replacement. The experience of 80 years, acquired in solving backstop installation problems in every type of building, is yours without obligation.

Write For New Catalog

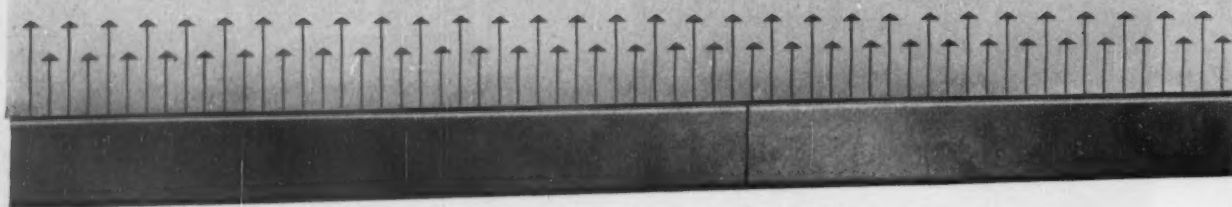
FRED MEDART PRODUCTS, INC. 3532 DE KALB STREET
ST. LOUIS 18, MISSOURI

World's Only Complete Single Source For Gymnasium Equipment

Telescopic Lockers & Wire Lockerettes & Basketball Physical Fitness Basketball & Foot Physical Therapy
Gym Seats Basket Shelving Grade Robes Backstops Apparatus ball Scoreboards Equipment



NEW! Trane Unit Ventilator 40-foot blanket of **FORCED**,



HEATS MORE EVENLY ...ends cold corners

VENTILATES MORE UNIFORMLY ...ends stale spots

STOPS DOWN-DRAFTS CONSTANTLY ...ends window chill

No other unit ventilator ever built can blanket the entire outside wall with a forced upward flow of tempered air, providing better heat and air distribution and also protecting children from down-drafts, even when the heat is off!

Big news! A really basic engineering improvement in unit ventilator development . . . the new TRANE Unit Ventilator System! Architects, engineers, contractors, manufacturers and school boards have long agreed that the ideal unit ventilator would blanket large window areas with a *continuous*, forced stream of tempered air.

Now TRANE product engineers have actually built a unit that accomplishes the ideal . . . *constant* perimeter



heating with individual unit control. Now you can have a classroom ventilator that will stop window draft with an upward moving blanket of tempered air. Do it *every minute the room is occupied*. Do it quietly.

Here's how it works: Part of the warmed air delivered by the new TRANE Unit Ventilator is forced out through two wings. This scientifically designed, easily installed ductwork distributes air uniformly along the entire wall. Special fans in the unit ventilator keep this air under pressure . . . forcing it *constantly* and *evenly*, even when the thermostat calls for no heat. Yes, it protects school children from drafts *even when the heat is shut off!*

The new TRANE Unit Ventilator blends room and outside air, tempers it with just the right amount of heat, and distributes it *evenly* throughout the room . . . eliminates cold corners and stale air spots for good!

No other unit ventilator system can deliver such constant, even distribution of heat and ventilation air . . . plus complete protection against window drafts.

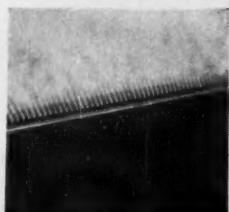
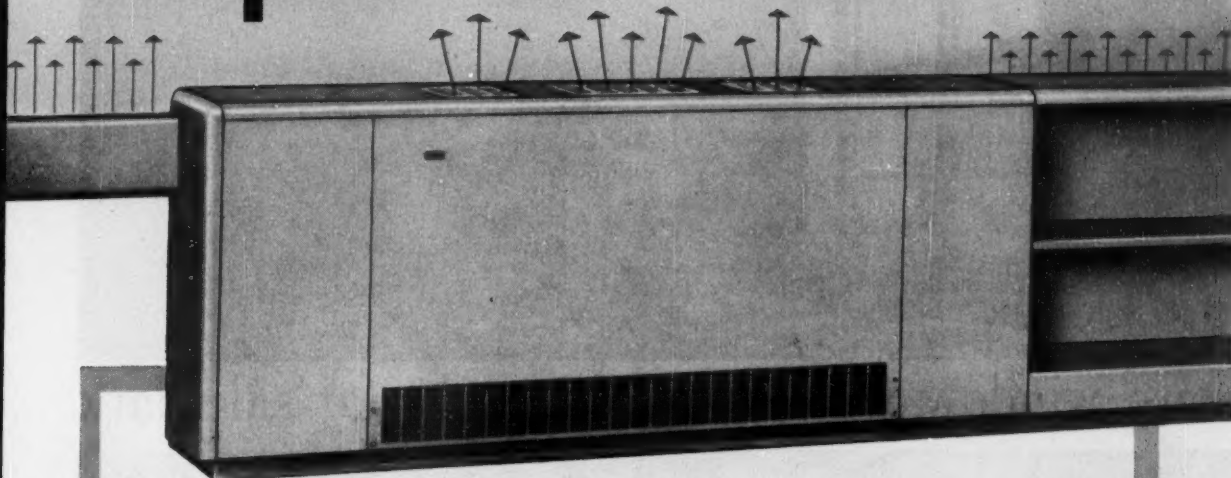
For more details, contact your TRANE sales office, or write TRANE, LaCrosse, Wis.

New TRANE

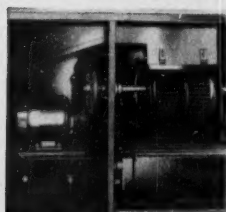
MANUFACTURING ENGINEERS OF HEATING, VENTILATING AND AIR

The NATION'S SCHOOLS

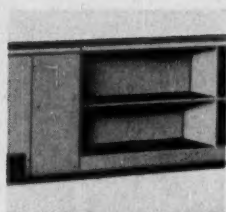
delivers continuous tempered air *[even when heat is off!]*



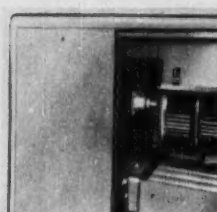
Laboratory photo of smoke test shows how this new idea works. Blanket of warm air moves upward from ducts in an even, solid stream. Drafts can't penetrate. Ducts come in 5-foot lengths, with a maximum extension to 15 feet from each side.



Exclusive fan, motor arrangement. Low velocity fans deliver air out through ducts, others move air through top of unit. Exclusive shaft and bearing assembly assures quiet operation. Standard motor, rubber mounted to stop noise.



Shelving optional—the new TRANE Unit Ventilator's ducts fit neatly into handsome, easy-to-install, bolt-together shelving. You can choose standard units in either open or closed shelving with a continuous, smooth top surface.



Removable panels—give easy access to all 3 sections. Front of each fan scroll detaches for easy cleaning. Filters are easy to replace or clean. Controls can be adjusted with panel in place, with unit in operation... a TRANE exclusive.

A great addition to TRANE's complete line of school heating and ventilating equipment



Centrifugal Fans



Heating Coils



Wall-Fin



Convectors



Unit Heaters

Unit Ventilator System

smothers every inch of draft...every minute of the day!

CONDITIONING EQUIPMENT The Trane Co., La Crosse, Wis. • East. Mfg. Div., Scranton, Pa. • Trane Co. of Canada, Ltd., Toronto • 80 U.S., 14 Canadian Offices

you get **34.4%** more light

with all-*Flexalum*[®] venetian blinds



ILLUMINATION NEAR WINDOW 440 F. C., CENTER 50 F. C., FAR SIDE 32 F. C.

bare window wastes light...leaves far side dark



ILLUMINATION NEAR WINDOW 170 F. C., CENTER 46 F. C., FAR SIDE 43 F. C.

Flexalum blind spreads light to far side of room

An exhaustive study by the Faber Birren Company* shows: A bare window gives extreme glare on one side of the room, insufficient light on the other. The FLEXALUM Blind, by reflection, *spreads* the high-intensity sunlight at the window throughout the room—giving more illumination with less glare. The brightness ratio, which was 14 to 1

with the bare window, is now reduced to a comfortable 4 to 1. *Copies of this study available on request.

Write for local sources and free file of venetian blinds information—AIA File #35-P-3.



Only all-FLEXALUM Blinds give these maintenance and durability advantages:



**Wipe-Clean Plastic
Tapes and Cords**

Cut cleaning time from hours to minutes. A damp cloth wipes away the stubbornest stains. Won't fade, shrink, or mildew.



**Snap-Back
Aluminum Slats**

Spring-tempered to snap back ruler-straight even when bent to a 90° angle. Baked-on finish won't rust, chip, crack, or change color.



Insist on this Mark!

The FLEXALUM "visible invisible" trade-mark guarantees a top quality blind. For satisfied clients specify all-FLEXALUM blinds.

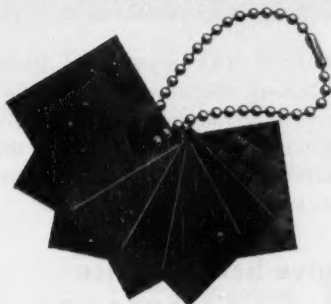
Hunter Douglas Corp., 150 Broadway, New York 38.



ONLY BOLTA LAMINATED TRAYS
give you complete
COLOR-and-PATTERN HARMONY
 of service and setting!

*Only BOLTA gives you such outstanding durability
 in patterns and colors.*

- Non-porous, satin-smooth surfaces
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- 8x10, 10x14, 12x16, 14x18, 15x20



Also Famous Boltalite Hard Rubber Trays
 in Sizes 12 x 16 and 14 x 18
 Also Boltabilt Trays in Round, Oblong and
 Oval Shapes in 15 Different Sizes

Because COLOR peeps up young appetites and spirits, other leading American schools choose BOLTA Laminated COLOR TRAYS . . . from a choice of 36 modern color-and-pattern combinations that lend zest to school meals and add cheer and sparkle to cafeterias. Only BOLTA gives you COLOR TRAYS like these . . . laminating 17 — yes, seventeen — separate layers for up-to-ten times as much durability, for as much as two-to-six years of extra wear. In the long run, BOLTA TRAYS cost you less — in fact, much less.

The **BOLTA** *Company*
 LAWRENCE MASSACHUSETTS

Planning to Re-decorate? Specify BOLTAFLEX for booths and furniture, BOLTA-WALL for interiors

Mark of Leadership



Herman Nelson Leads...

We build equipment that's easy to service — and offer you a trained staff of field personnel always available.



*Superintendent of Schools, GLENN SCHOENHALS;
Architect, JENSEN AND KEOUGH; Mechanical Contractor, J. D. NAYLOR AND SON.*

The photograph above of the interior of the new Southfield High School, Detroit, Michigan, shows another fine example of how perfectly Herman Nelson Unit Ventilators are designed to harmonize with modern school architecture. The photo at the left—shows the exterior of this beautiful new school.

Here's why Herman Nelson Unit Ventilators give better service

Designed as fine furniture—built like a battleship—Herman Nelson Unit Ventilator Products have many quality features not found in other unit ventilators. For example: the beautiful linoleum table-top surfaces are *not* thin felt-backed *but* are $\frac{1}{8}$ inch burlap-backed top quality "Battleship" linoleum.

The ventilating grilles are *not* stamped (as in other units) but are cast from heavy steel. The streamlined doors in the front of the cabinets are *not* awkwardly hinged — but run smoothly on rails. Doors are removable for cleaning and interchangeable with other cabinets.

in Product Serviceability

Herman Nelson unit ventilator products have earned their leadership position because they do a better job with less servicing. And when they need servicing—as mechanical equipment must, they are *easier to service*.

School custodians praise Herman Nelson unit ventilators because they are easy and practical to service. School principals have long recognized their low-cost maintenance record. Individual school teachers prefer Herman Nelson unit ventilator products because *they see the difference* in the children they are educating. They enjoy working and teaching in a "perfect classroom climate".

Let's examine some of the "owner benefits" provided by Herman Nelson:

FIELD SERVICE—these men are factory trained experts in operating and servicing Herman Nelson school equipment. They're available for service or advice at any time. They're on the job when the unit ventilators are being installed. They check all installations and report their findings to the Company.

When the job is completed—they work with and advise the school custodian on the proper handling of the new equipment. They go over each step in the operation. They supply him with his own Operational Manual.

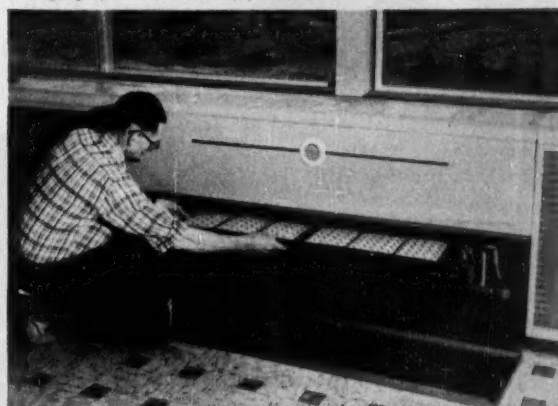
When the installation is completed—the Herman Nelson man on the job then arranges a meeting with the school principal, teachers and the custodian. He explains, in detail, the simple method of operation—shows them what the equipment is designed to do and what it will do—with normal care. This, plus our generous guarantee, is the standard service offered by Herman Nelson.

If you are planning a new school or a modernization program—it will pay you to compare and then specify Herman Nelson Unit Ventilators—another product of American Air Filter Company, Inc., Dept. NS-5, Louisville 8, Ky. We invite you to write for Bulletin No. 3500.



ABOVE: Here's how easy it is to oil the Herman Nelson unit ventilator. Just lift the cast steel grilles for easy access.

BELOW: A view of the unit with the front panel removed for easy changing of the throw-away filters.



BELOW: This is a typical scene in a modern classroom. The Herman Nelson Field Engineer is demonstrating the new Herman Nelson unit ventilator to the school principal, the teacher and the custodian. One of the plus services offered by Herman Nelson.



Heavy cast steel grilles that open for servicing.



DRAFT STOP
TRADE MARK

HERMAN NELSON

SYSTEM OF CLASSROOM
HEATING AND VENTILATING

Doors are removable and are interchangeable without tools.

$\frac{1}{8}$ inch thick heavy "Battleship" quality linoleum surfaces.



**L. Gardner Moore, Manager
Shoreham Hotel*, Washington, D. C. says:**

"Food service at the Shoreham requires the best in cooking equipment. Magic Chef ranges meet all expectations for speed, flexibility and high standard of performance."

** (As recently publicized in the "Saturday Evening Post")*

THANK YOU MR. MOORE

Large or small—whatever their cooking requirements may be, economy-minded chefs everywhere agree with you. *Magic Chef* maintains these same high standards of quality and dependability in *Cafe Line* ranges too. That's why we can say... "More chefs BUY *Magic Chef* than any other range!"



HD 18
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THE ORIGINAL OVEN HEAT CONTROL ROUND-TYPE GRATE TOP BURNER



Invented and pioneered by *Magic Chef*... you'll find this world famous Red Wheel Regulator only on *Magic Chef*.



This burner revolutionized the commercial cooking industry... gives even heat distribution... won't plug up from spillovers.

SANITARY BURNER TRAYS

These sanitary trays catch and hold spillovers—are easy to clean. Automatic top burner lighting is built right into tray.

You'll find all these *FIRSTS* and many more on the *Magic Chef* "Cafe Line."

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Matchless cooking with

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No more fumbling with matches when you use "magic-lite" cafe line ranges. Just turn the knob for instant oven lighting. "magic-lite" is optional on all *Magic Chef* ranges.

Looking Forward

Who's Uneducated?

COMES time to write editorials, and the editor does his best to get righteously indignant. But the mood comes reluctantly. It's so nice not to be mad at anybody—for the moment—on a beautiful spring day after a mild winter.

Somewhat anticipating this attack of spring fever, the editor keeps a file of "things to get mad about." Heading the list is an impatience with the American people for tolerating today a situation that permits two and a half million of our people to remain illiterate.

At a time when shortage of manpower is limiting our military strength and handicapping our industrial production, a million men are almost automatically crossed off the eligibility list for military service or dismissed with a "No" from employment agencies because they can neither read nor write.

In World War II, 716,000 men were rejected as "mentally deficient," with 75 per cent of these coming from the South.

Large pockets of illiteracy are found among the children of migratory workers, and yet the federal government is spending many times as much on assistance to migratory birds as on assistance to the children of migratory families.

Deep concern for this waste of human resources is not part of a propaganda campaign for federal or state aid for schools. The initiative for the three-year study which has just released these startling data traces back to Gen. Dwight D. Eisenhower and his personal concern about the manpower shortage that was so tragically revealed during the Battle of the Bulge. Later, as president of Columbia University, Mr. Eisenhower was largely responsible for organizing the study, known as the Conservation of Human Resources Project.

Financed by 13 big corporations and the Ford Foundation and staffed by more than a dozen research experts, the project has recently made its first report in the form of a book, "The Uneducated."

The present policy of Selective Service in rejecting those who are deficient in schooling "seriously compromises the ideal of universal military service," declares the report. "Moreover, there is a direct relationship between illiteracy and the cold war."

The report points out that Russia "apparently has made substantial strides within its own borders in eradicating illiteracy and uses this progress as a major propaganda weapon," calling attention to the considerable number of

illiterates in America, "which boasts so much about its standard of living."

The study shows that most of this illiteracy is in the South and West among the Negroes, the Indians, and the Spanish-Americans. In southern United States, for example, South Carolina had a Negro rejection rate for educational deficiency during World War II of at least 175 per thousand as against the white average of 43 per thousand.

The project summarizes its 246 page printed report with emphasis upon this conclusion:

"If the United States wants to strengthen its military arm, if it desires to contribute to the heightened productivity of the economy, if it wants to buttress the foundations of American democracy, then it is incumbent upon the country to work for the eradication of illiteracy among the population.

"Its major attack must be directed toward the source, which means the strengthening of elementary education, particularly in the poorer states. The corrective action further involves a constructive use of special training units within the armed services so that a large number of illiterate young adults can acquire a basic education.

"And finally, the effort calls for community action at every level to ensure a maximum opportunity for those illiterates who cannot profit from a military program."

Our two and a half million illiterates may be "the uneducated," but the rest of us really are the ones who are dumb.

Fooling the People

ALL this fuss about a few textbooks in the social sciences places too much emphasis upon the importance of books in modern education.

Sometime in everyone's youth comes the desire to be an amateur magician. And the first thing you learn is to divert the attention of the audience by a fancy flourish while you or your assistant is really getting set for the act. We think there's a little of this hocus-pocus in the relentless drive of a few groups to make a life-and-death issue of two or three textbooks that are now somewhat outdated.

In every subject, and especially in the social sciences, the complexion of what is taught is determined primarily by the teacher and not by the text. If critics with closed minds want to eliminate all controversial issues from the curriculum, then it would be more to the point if they recommended the development of robots rather than human

beings as teachers. However, these robots would be built according to only one blueprint, so that they could express only those ideas approved by the criticizing group.

Even this wouldn't control thinking. The child today learns not only through what happens in the classroom but also from what he hears on the radio, sees on television or in the movies, or even hears his parents talk about.

Thought censorship in the home and the church and in the entire community is required if children are to be prevented from seeing more than one side of controversial issues.

These persistent, irrational attacks on a few textbooks are primarily a ruse—a device to discredit the entire idea of free public education. But, like the bunny in the magician's hat, the trick is fooling a lot of people.

The Best Architect

HIRING the cheapest architect can be an expensive mistake. The Fairfax County school board, Fairfax, Va., was told this, in substance, by an outside consulting firm. The experts had been employed to study the county's \$12,000,000 construction program and to make recommendations for another \$11,000,000 program recently approved by the voters.

Said the independent advisers to the Fairfax board: You have not been paying architects enough to assure long-range economy. You would have had inferior school buildings if it weren't for the fact that you have had good contractors and good inspection.

The advice (including detailed studies), for which the Fairfax board is paying \$7000, is sound counsel for all school boards. It is tragically true, as the consultants told the people of Fairfax County, that the continuing maintenance cost of poorly designed and constructed buildings will far offset the initial higher costs of well planned, soundly constructed buildings.

True, too, is their advice that schoolhouses should be planned for greater flexibility in the organization and use of space.

A Nightmare of Bigotry

OUR Oscar of the month goes to *Collier's* and to Mrs. Dorothy Frank for the article, "I Was Called Subversive" (March 28 issue).

It's the story of the incredible persecution of a mother who publicly advocated that Los Angeles schools should teach about UNESCO. Mrs. Frank describes open meetings of the school board where hatred and hysteria, generated by speakers from pressure groups, blotted out facts, reason and even common courtesy.

If you want facts, if you want to know the names of people and organizations who border on fanaticism in their persecution of those who oppose them, if you want to be prepared when similar smear tactics and mistruths reach your own community, then read this article in *Collier's*.

Mrs. Frank's message to other parents in America is this: "I am writing this in the hope that an eyewitness record of what happened in Los Angeles may serve as a

forewarning to other communities which may be similarly attacked, a forewarning against the splendid sounding symbols with which the foes of democracy surround themselves, and their perversion of word meanings. Los Angeles is but a sector on a front that stretches across America.

"Even here, we have lost an engagement, but not the battle. We have seen, in this city, a rising from apathy, a reawakening of thousands of representative Americans. Abruptly, many of them have realized that we defend democracy not only on distant battlefields, gun in hand, but here at home with only reasonable words as weapons. We at home sustain casualties, too, not in dead and wounded, but in lost jobs, and blackened reputations.

"And yet I know, for myself, that if I had quit the fight, I would in truth have betrayed my country."

It's Not the Money!

DID you know that 350,000 teachers left their profession in 1951? This opening statement caught our attention in the April number of the *Rotarian*. It was part of the magazine's debate of the month, on the topic "This School Business."

"Teaching—and Why I'm Quitting It" is the theme developed by Helen Cranmer, a secondary school teacher. The defender of teaching as a profession is Matthew P. Gaffney, superintendent of New Trier Township High School at Winnetka, Ill.

The high school teacher maintains that those who quit the profession do not do so primarily because of poor pay but rather because of "progressive education, student government, and 'keep the kids happy' philosophy." But these things could be tolerated, writes Miss Cranmer, if it weren't for weak administration. Finally, she says, the teacher's lot is made unbearable because there is too much disciplining of the faculty.

The real insight into her desertion of the teaching profession probably is reflected in her philosophy, which she expresses in these words: "Acquiring the knowledge won by a previous generation is not an easygoing process. Learning is essentially painful."

We don't know whether Mr. Gaffney saw his opponent's manuscript, but he diagnosed the situation quickly when he observed that there are two types of people who leave the profession: First, the maladjusted, about whom he said:

"The tragedy isn't that so many of them leave the profession; the tragedy is that so many of this type remain in it."

Members of the second group, he said, "who leave the profession are admirable people but who definitely are not temperamentally or emotionally equipped to work with young people."

We don't know to which of these two groups Miss Cranmer belongs, but when one recalls her philosophy of education it is easy to understand why she was unhappy as a teacher.

The Editor

THE NATION'S SCHOOLS

DISASTER DEFENSE

CHARLES T. BYRNE
Director of Public Information
San Diego City Schools
San Diego, Calif.

San Diego public schools lead the way

WEDNESDAY, March 25, was a warm, hazy spring day in San Diego. Traffic hummed in the streets, and most of the city's 430,000 citizens were occupied with their normal week-day cares and activities. This included nearly 57,000 pupils busy with their studies in the public schools. There was little in the warm stillness of the midmorning air to suggest thoughts of disaster, but . . .

It was exactly 10:25 a.m. when James Blethen, coordinator of civil defense for the San Diego city schools, picked up the telephone in his office in the Education Center, the school system's administrative headquarters.

"Board of education . . . civil defense message . . . drill." He spoke the words crisply into the instrument, then waited for the switchboard operator to repeat them before hanging up. That was all.



Above: Upon hearing the "alert" signal pupils at Woodrow Wilson Junior High School leave their classrooms to take safety positions in the hallway.



Left: Junior high school girls take the approved "kneeling" safety position during the drill.

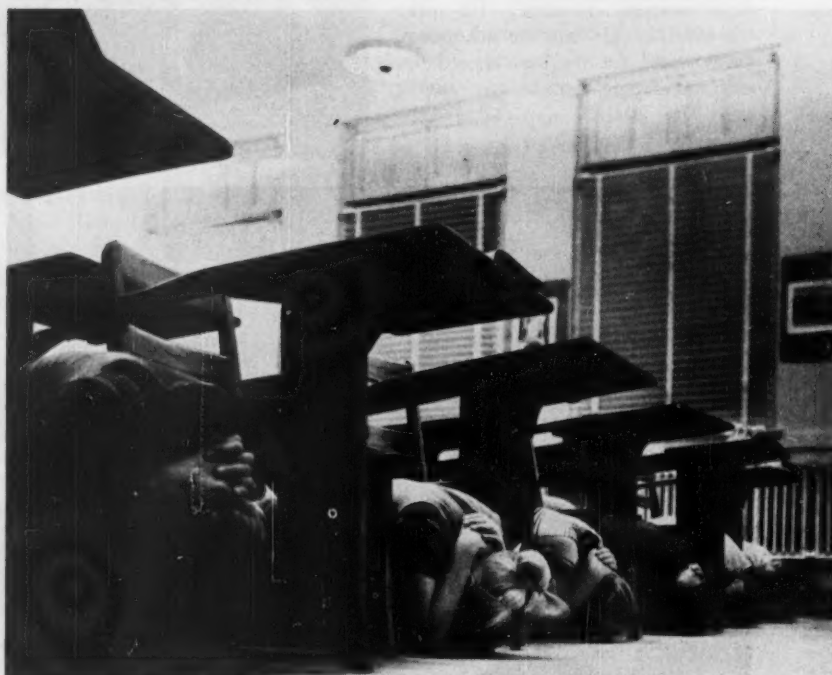


Immediately the two switchboard operators on duty plugged in 13 connections and repeated the identical message to 13 secretaries within the building on a conference hook-up. In a few more moments each of these secretaries, dialing directly through "outside" connections, relayed the message to one or two schools each, 22 schools in all.

Quickly secretaries in the 22 relay schools, each knowing exactly what to do, passed the message on by telephone to other schools. As the terse message was received in each school, a prescribed alarm was sounded over the bell signal system.

Within six minutes the telephone fan-out network had carried the message to the 72 schools in the San Diego city system. And in that same brief span all pupils in the schools, plus several thousand youngsters in associated child care centers, had moved to areas of maximum safety within their individual buildings and had assumed positions of maximum personal protection. All within six minutes.

This dramatic demonstration of civil defense preparedness in San Diego schools was witnessed by some 4000 parents and other citizens who were visiting in the schools. They were there by invitation of the schools and



Top of Page: These junior school pupils responded instantly to the "alert" signal bell. Here they rise from their seats to take protective positions between the rows of seats. Above: These are pupils in the same class an instant later. They have dropped into the kneeling safety position between the rows of seats and under the writing boards where possible. Similar scenes were enacted in every school in San Diego during the March 25 civil defense drill, witnessed by some 4000 citizens.

This billboard, and many others like it, was donated as a public service during the civil defense promotional campaign.



the city office of civil defense to see for themselves firsthand the workings of the schools' carefully prepared plan for protection against disaster.

The public was told beforehand the approximate time of the drill. But James Blethen was the only person in the city who knew the actual time in advance.

The clocklike precision with which the warning was spread and with which the schools reacted was a practical and convincing demonstration to the city of the effective protective measures of which the schools were capable in event of a disaster preceded by a warning of six minutes or longer.

LEAGUES AHEAD

There's no doubt, says the city's office of civil defense, that in event of an enemy atomic attack on San Diego—a prime target because of the heavy concentration of military bases and aircraft factories—the schools are leagues ahead of the city generally both in organization and in the actual training for the saving of lives.

In the spring of 1952 the San Diego schools' civil defense organization was

recommended by the California State Office of Civil Defense as a model all California schools might profitably adopt. More recently the federal Civil Defense Administration asked for complete details of the San Diego plan. It intends, said the C.D.A., to recommend the San Diego plan to schools on a nationwide basis.

Recently the San Diego Office of Civil Defense decided that the schools were so far ahead in their preparations to meet the eventuality of an attack that it was time the rest of the city began to catch up. The entire month of March was devoted to a heavily publicized campaign built around the theme, "Your Children Are Prepared, Are You?"

All media of public education, led by the newspapers, radio and television, drilled the theme home for a month. A poster contest was held in the high schools to develop the theme visually, and the winning design shouted the message to citizens from billboards, newspaper advertisements, bus cards, trash can posters and window placards. The campaign, climaxed by the citywide drill in the schools,

was designed to encourage increased civilian participation in the city's civil defense organization, which has an excellent framework but not enough manpower.

What are the facts of the San Diego city schools' civil defense organization which have led to recognition from local, state and federal civil defense officials and which have caused the San Diego plan to be so widely recommended as a model program?

BASIC DECISIONS

Supt. Will C. Crawford and his advisers within the school system, working in close cooperation with civil defense officials, made some important basic decisions at the outset. First, civil defense should not be built on hysteria. Further, civil defense should not be based on air raid drills alone—a mere extension of fire drills. Civil defense should, in fact, be all-inclusive, involving instruction and responsibilities for all staff members and pupils alike, and it should be integrated into the city's total civil defense organization.

The board of education gave official

backing to these policies, and the job of preparing to save lives if disaster should strike began. Here are the steps taken as the organization developed:

If school children were to be trained in protective measures, the staff must be trained first. The board of education early adopted the requirement that all regular employees of the school district should complete the American Red Cross standard first aid course. Scores of classes were organized over the city, and when the spring semester began in 1951 (the Korean "incident" had been touched off in the summer of 1950) the task of training some 3000 employees was well under way.

As for pupils, it was decided that basic classroom instruction was the first need. The federal Civil Defense Administration had published for national distribution the booklet "Survival Under Atomic Attack," and this became the text for a three-hour course of instruction for all secondary school students in the spring of 1951.

Since this book was above the reading level of many younger pupils, it was adapted under the title of "Americans Are Always Ready" for instructional use in elementary classrooms. In the primary grades care was taken not to arouse apprehension and misunderstanding and excite panic. "War drills" were discussed, never "atomic bomb" drills. Kindergarteners learned a new game in which they became "little bears," who always went promptly to their "den" (the safety area) on the signal of their teacher.

ENROLL IN RED CROSS

At the same time, all junior high school pupils were enrolled in the Junior Red Cross first aid course, and all senior high school and junior college students took the Red Cross standard first aid course. First aid instruction has continued; in fact, completion of the standard course is a prerequisite for graduation from high school.

Concurrently, a survey of all school buildings was begun in order to discover the areas of greatest safety, and drill procedures began to be worked out. At first emphasis was placed on teaching pupils the positions of maximum self-protection against a blast or flash.

Meanwhile, planning was continually under way. By September 1952 a committee of principals and teach-

ers, assisted by representatives of the office of civil defense and the fire department, had completed a detailed civil defense blueprint under the title "Manual of Organization for Defense and Disaster Services."

This was presented to the board of education, along with a recommendation that a coordinator of civil defense be appointed to translate the blueprint into an organization integrated systemwide and into functioning services. The board agreed, and James Blethen, a high school science teacher, was given the assignment.

The citywide public drill in March signaled that the goals set forth in the manual generally have been achieved. Major accomplishments under Mr. Blethen's coordination have been the establishment of the telephone warning network, citywide standardization of self-protection procedures, and the organization, according to plan, of each school building into a self-contained civil defense unit.

Every teacher and pupil in the city schools now knows exactly what to do in event of an "alert" signal, such as that which touched off the drill March 25, or in the event of a blast or flash without warning.

SHELTER AREAS DESIGNATED

Each school building has been carefully surveyed, and shelter areas were designated depending upon such factors as the type of construction, location of the building, the direction of the probable target area (military bases and aircraft factories), and space available.

For example, in a double-loaded corridor school built around a court, the safety area for outside rooms is most likely to be a hallway (to escape flying glass), while the safety area for inside rooms will be under desks and tables within the rooms. Basement areas, where available, serve as safety areas in other buildings. But in each instance the selection is dependent upon local conditions.

Every pupil knows that if he hears the "alert" signal there will be time for him to reach his designated safety area from wherever he may be on the school grounds. Arrived there, he will drop into the "kneeling" self-protection position. In this position he drops to his knees, back to windows, buries his face between his knees, closes his eyes, firmly clasps hands at the back of his neck, and presses his elbows tightly to his knees covering his ears

with his arms. Never does he gaze at the light from a flash.

Similarly, every pupil knows that if without previous warning he sees a flash or hears a blast or the sharp command "Drop!" he must fall immediately to the "kneeling" protective position if inside a building or to a "prone" position if outside. In the prone position he drops flat on his stomach, with his face buried in the crook of one arm while he protects the back of his neck and head with his free arm.

Object of the prone position is to offer as low a silhouette as possible for a possible concussion wave and flying debris.

SCHOOL ASSUMES CONTROL

In event of a major disaster during school hours, such as an atomic explosion, the schools automatically will assume complete authority over school children. No child then can be released until permission is given by the city civil defense authority. This is designed to eliminate unnecessary movement of citizens in the confusing post-disaster period. Too, it is thought children will be safest at school.

Furthermore, in the event of an actual disaster, each school is set up to operate automatically as a civil defense unit integrated into the city's over-all organization. The principal would function as director, teachers as wardens, and school nurses as medical coordinators—each staff member has a specific assignment.

Similarly, each school building has a specific designation in the city's master civil defense plan. Some are designated as emergency first aid stations, some as evacuation hospitals, some as emergency feeding stations, and some as relocation centers.

Finally, as the last step in the over-all organization, all school employees, certificated and classified alike, will be registered under civil defense's emergency welfare service classification.

Each person so registered will, in event of disaster during nonschool hours, report back to his regular school if possible. There, along with regular civil defense and Red Cross teams, he will participate in the over-all post-disaster services, serving in the capacity for which he is best fitted.

In this whole complex organization, one rule comes first for all school personnel. In event of disaster of any kind, protection of school children comes first.



THE American teacher asks for no special status, seeks no immunity for his personal advantage. But he does feel a deep professional obligation to acquaint students with facts and to fulfill the other responsibilities with which he is charged, and he therefore claims the right which every teacher must have in order to function as a teacher, the right to explore, to experiment, to reflect, and, above all, to share his findings with his students. If the public denies this freedom to the teacher, then the public not only deprives the teacher of an essential attribute of his profession but, what is more serious, also limits the educational opportunities of American youth. I am confident that, once we American taxpayers have a clear view of the consequences, we will not want teachers who, as a policy, leave students unacquainted with novel facts, unconventional ideas, and unorthodox opinions.

Now, on this question of subversives, I wonder how many kinds there can be. There is the Fascist type and the Communist type, the kind we all know about, the kind the F.B.I. is looking for, and properly so. But how about the person who intimates that honest and patriotic Americans whose views he doesn't like are disloyal, or who would smear those who come to the defense of decent citizens under attack, or who pronounces as suspect those who insist that any accused person be given a fair hearing?

Might it not be said that those who make men afraid to exercise their civil liberties are themselves engaged in a form of subversive activity? Is the man who expresses hate or contempt for persons of another race or religion not diminishing the rights of such persons, rights guaranteed to them under the Constitution of the United States? Are those in government who withhold vital information from the public and broadcasters and journalists who willfully slant and distort the news not poisoning democracy at its source?

Are those who use official position or financial power or take advantage of some other situation to discourage

THIS QUESTION OF SUBVERSIVES

CLAUDIUS O. JOHNSON

Professor of Political Science
State College of Washington
Now on leave as Fulbright Lecturer,
Universities of Sydney and Melbourne, Australia



The men, such as Abraham Lincoln, who made America great were men of understanding, of character, capable of toleration and accommodation.



"We think with our blood," Hitler and the other Nazis said defiantly.

free discussion not undermining a basic tenet of the American system? It seems to me that there are subversives and subversives and that an injudicious or mean-spirited campaign to check and weed out the common variety of disloyal persons may itself be subversive when it becomes so broad and inclusive in its scope that it not only spots the disloyal but also menaces good citizens whose only crime is that they have independent minds, do not run with the herd, or are simply trying to remain calm and dispassionate in a period of crisis.

Is it necessary in maintaining our internal security that we accuse or suspect persons of disloyalty who happen to deviate somewhat from the path of political or economic orthodoxy? Did America grow fat on orthodoxy, or did we thrive on the right of dissent? Should we find grounds for suspicion against an individual because of some chance remark or because of some printed sentence lifted out of its context? Should we anxiously scrutinize all books and magazines for views that may be objectionable to the more conservative half of the population? Shall we judge mature men and women of

40 by what organizations they belonged to 20 years ago or by what they said or wrote a score of years ago? Should we, figuratively speaking, look over the shoulders of our fellow citizens as they read and listen through keyholes to their talk?

Much of this sort of thing is being done in local areas by unofficial persons, institutions and organizations. They are zealous and well meaning, and if they cooperate directly with officials, of course, there is no objection to their activities, but if they operate privately, making their own private lists of subversives, marking those they are to penalize through loss of jobs or otherwise, then it seems to me that their operations are most likely to have pernicious results. I am a great believer in the F.B.I. and in its director, J. Edgar Hoover. Let me quote some advice he gave us some time ago. He said: "Avoid reporting malicious gossip. . . . Do not circulate rumors about subversive activities." Once you have made your report to the F.B.I. "do not undertake to make private investigations. Hysteria, witch-hunts and vigilantes weaken internal security."

I suppose it is at this time unavoidable that much of our action should be prompted by our emotions. The Nazis used to say defiantly, "We think with our blood." That kind of thinking did not pay off well in the long run. True, emotions have a large and proper place in our lives as citizens, but emotions should not rule the mind. Let us take Edmund Burke's advice and by "rational, cool endeavor" put in balance the measures for internal security and the rights of individuals. And let us have humility in our thinking and respect for those who disagree with us, conceding to them the honest motives and patriotic attachments which we claim for ourselves. And, above all, let us accuse no man falsely or for a political purpose.

SUPREME TRAGEDY

That so many millions of sturdy, robust Americans, dwelling in thousands of communities, should regard so many of their neighbors, who are equally devoted to their country, as un-American and be seeking to undo them is, in my opinion, the supreme tragedy of our time. One half of America will not be whipped into line by the other half. From such an attempt will come only fear, hatred and division. And in calmer days all America will be sorry that the attempt was ever made.

Who are the men who made America great, the men whose birthdays we celebrate, whom we read about in our school books, whose lives we commend as examples for our children? Were they small men, vindictive men, intolerant, arrogant men, scheming politicians, shifty demagogues who would confuse the thought and curb the expression of their fellow citizens? Were they given to devising ways and means of "getting" people whose opinions they did not like?

No, the men who made America great were men of understanding, of character, capable of toleration and accommodation, leaders who believed in the essential integrity of their fellow Americans. And the future greatness of our country will be measured by the extent to which we follow their example. If we, and those who follow after us, match our lives to theirs, there will always be an America, proving to all the world that the invincible strength of a free country lies in the freedom of the individual "to prattle and print, in what way he pleases, and without anyone to make him afraid."

In Los Angeles and Hawaii

Teachers speak freely in OPINION SURVEY

THE year 1953 may be recorded in education's history as the beginning of a new era of understanding in teacher personnel. With Hawaii and Los Angeles blazing the trail, nine school districts in this nation are conducting, through an outside independent agency, inventories that will measure the attitudes of the entire teaching personnel.

Opinions are being expressed on such controversial subjects as working conditions, curriculum materials, pay, confidence in school board members, effectiveness of administration, and security of job. In the complete list of 19 categories there also are questions concerning relations with immediate superiors, professional satisfaction, identification with the school and its program, personal freedom, and opportunity for growth and advancement.

MORE SURVEYS PLANNED

In addition to Los Angeles and Hawaii, other school districts now under contract for this independent survey include Champaign and Olney in Illinois; Media, Hazleton, Pottstown and West Chester in Pennsylvania, and Napa in California. A score of other school districts are negotiating similar contracts, and it is expected that 50,000 responses will have been tabulated by the end of this school year. From the trends established by this research, it soon will be possible to predict rather accurately the high and low spots of teacher morale in this country.

The entire teaching personnel expressed opinions in the Hawaii and Los Angeles surveys. In Hawaii, some 4000 employees of the school system for the islands answered the questions. In Los Angeles, the 16,000 certificated employees did their voting on March 17, St. Patrick's Day.

ARTHUR H. RICE

Purposes of the surveys are rather apparent. In Los Angeles, the board of education expects that facts revealed by the inventory will help the schools to reduce teacher turnover, recruit better personnel, improve communications, and effect financial savings.

RESULTS MADE PUBLIC

The accompanying chart presents the major findings of the survey in Hawaii. These results were made public in a formal presentation to the Hawaiian legislature and the Hawaiian Education Association early in April. The report on the Los Angeles inventory will not be made until sometime in May.

Whether teacher morale in Hawaii, as revealed by this survey, is indicative of similar conditions in the States is a matter of conjecture.

In each of the categories surveyed, the teacher had an opportunity to answer anywhere from five to 11 questions. The percentage shown for each category is the average of the responses. Some characteristic attitudes were:

Work demands, working conditions. Hawaiian teachers were not too pleased about working conditions. In general, they thought their work load was about right and that the administration was doing all it could. But they were especially unhappy about the working environment. They believed that the facilities for the instructional program need a great deal of improvement. Also there was a great request for more unassigned time, especially in the upper grades.

Pay. Almost with one voice, the teachers said: "Our salaries are lower than in other systems." And, "It is

difficult for us to live comfortably on our present salaries."

Benefits. There were no serious complaints about retirement and sick-leave provisions, although a number of teachers observed that retirement provisions were not clearly understood.

Friendliness. Friendliness, for which the Hawaiian Islands are famous, also pervades the school system. But even in Hawaii there are too many people "who avoid their fair share of extracurricular activities" or "who are more interested in personal advancement than in the school program."

Relations with immediate superior. Eleven questions pertained to this topic, and every one of them received a rating above the median for the inventory. Here again is more testimony of Hawaiian friendliness.

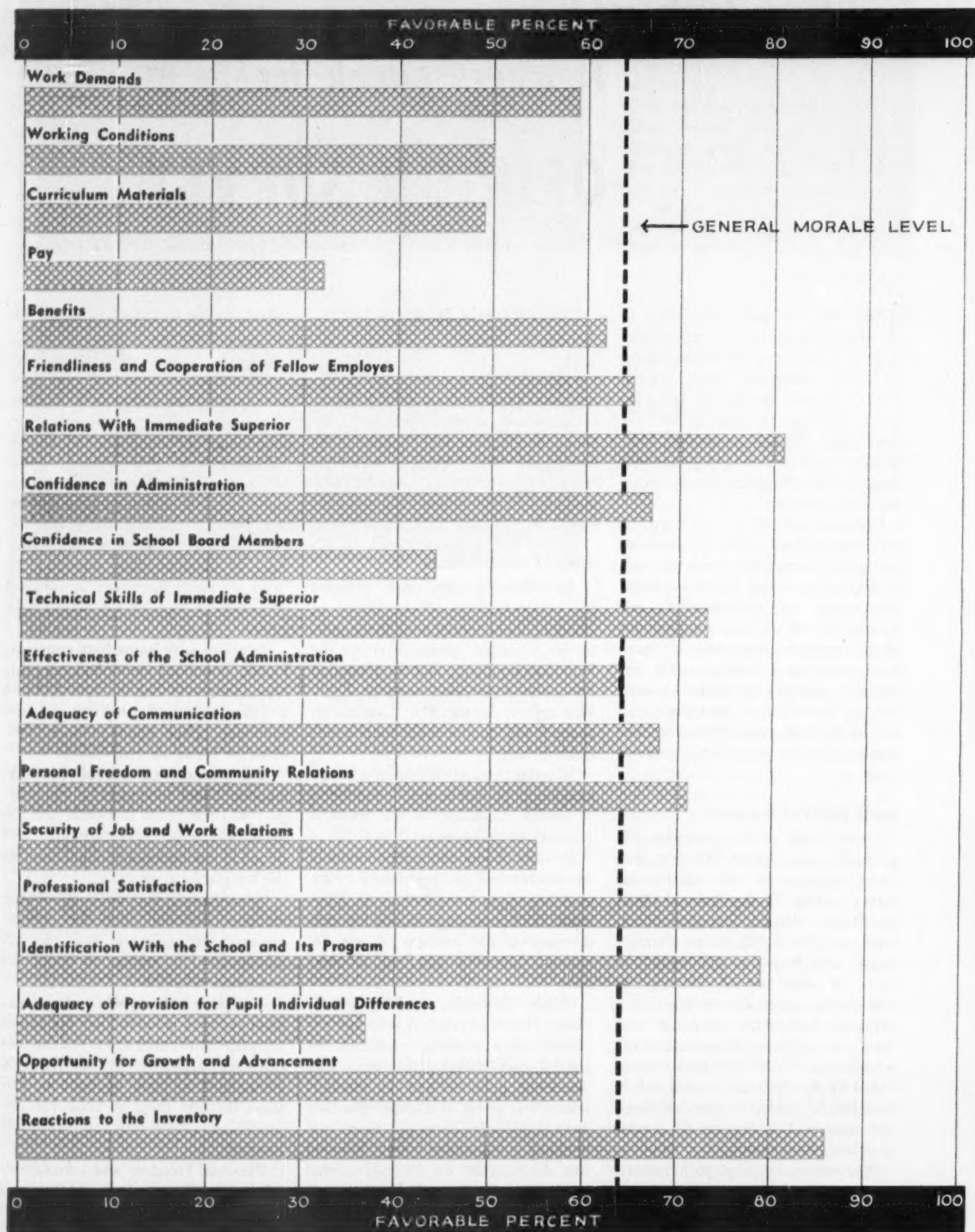
Effectiveness of school administration. Chief complaint in this category was the belief that there are too many classroom interruptions, and these do not necessarily contribute to the instructional program.

Nevertheless, the majority of the teachers believed that the system operates efficiently and that the administration is trying to build an integrated program.

Adequacy of communication. Most teachers believed they are rather adequately informed about policies and plans and also that they are sincerely encouraged to offer suggestions, but some thought there is need for improvement in the way complaints are handled.

Personal freedom and community relations. Hawaiian teachers believed they are quite free to discuss controversial issues. They did not think that they are restricted in their personal activities or that they are obligated to participate in too many community affairs. On the other hand,

WHAT HAWAIIAN TEACHERS THINK OF THEIR SCHOOL SYSTEM



This chart shows the percentage of favorable replies expressed by the 4000 Hawaiian teachers toward existing conditions and policies in each of the 19 areas surveyed.

they believed that citizens generally could show more interest in their schools and be more enthusiastic in helping with school affairs.

Professional satisfaction. Sixty-six per cent of the teachers said that they would choose teaching as a career if they were to start over again, while 88 per cent were convinced that their work really is worth while.

Identification with school program. The high degree of professional satisfaction also is reflected in the similar degree (79 per cent) to which teachers are identified with the total school program. While they were reasonably satisfied that the over-all curriculum is on the right track, they did feel that Hawaiian schools need to do a better job of preparing pupils for life.

Provision for individual differences of pupils. Failure of Hawaiian schools to provide adequately for individual differences probably is no more severe than it is in the States, although that fact remains to be established. However, Hawaiian teachers felt strongly that adequate facilities and procedures are urgently needed. Almost with one accord, the teachers said: "We do not have enough time for remedial work." And, "We need more individual facts about our pupils." It would help a great deal, too, they said, if more pupil counseling facilities were available.

Opportunity for advancement. Hawaiian teachers were not exactly excited about their opportunities for professional advancement. While they recognized that there are opportunities for professional growth and continued education, the majority of them were skeptical about chances for advancement. Sixty per cent of them questioned whether the people who got promotions actually deserved them.

Reactions to inventory. Most of the teachers liked the idea of the inventory. They said: "It's a good way to let the administration know what teachers think, and some good may come from filling out this questionnaire."

An interview with several of the experts who planned and supervised the surveys for both Hawaii and Los Angeles brought out answers to questions that would occur to any school administration contemplating such an inventory. Some typical queries and responses follow:

Q. Do school board members fear surveys of professional morale?

A. Some do. The first comment of timid people is: Why stir up trouble? Why put ideas into the heads of people that might not occur to them otherwise?

This, of course, is misunderstanding on the part of executives. The inventory doesn't create new ideas in the minds of employees. These ideas already are there. Teachers are not automatons. They are thinking individuals. School boards ought to know what their staff members are thinking, as is also true for industry and for the military.

TEACHERS' OPINIONS

Q. What do teachers think about it?

A. The principal fear of teachers is that the poll may not be anonymous. They think that in some underhanded way they may be identified with the opinions they express.

Q. How do you overcome this fear?

A. To ensure complete freedom of expression, we do not permit anyone to see the completed forms, except the members of our own staff who tabulate them. In Los Angeles, the booklets were deposited in locked ballot boxes. Not even the superintendent or the school board may see these booklets. In fact, the reply forms are destroyed just as soon as the report has been tabulated.

Furthermore, local committees are set up to ensure that the survey is conducted with anonymity.

Q. How, then, are you able to make comparisons between groups?

A. The replies are coded for geographical areas in large school districts and for principal divisions or groupings.

Q. Aren't some people skeptical about the findings being made public?

A. We will not conduct an inventory unless the findings are to be made public. That is part of the contract.

Q. What is the attitude of executives toward surveys?

A. We had thought that commercial firms having the most serious personnel problems might want the inventory first. That wasn't the case. The companies that are the most progressive gave it first. And they are the most likely to do something about the results. It's the insecure executive or administrator who fears to get the facts.

Q. What reason is there to believe that your instruments and methods of obtaining these opinions are really scientific?

A. We are putting into these education inventories the experience and research of many years of similar opinion measurement in business and industry. The questions used have evolved to a large extent from 3000 questions that were tried in industry. Incidentally, technics for measuring opinions were originally developed by educators, then taken over and applied by industry, and now we're bringing them back into education.

Q. Is this type of inventory relatively new?

A. No, surveys of this kind have been going on for more than 25 years in industry. Sears Roebuck & Co. was one of the early companies that started morale inventories back in the mid-Thirties. One of the company's top executives had observed that he had reports of the financial and inventory status of his company, but he had no systematic way of finding out about his personnel. He wanted to find a quick, simple and inexpensive way of measuring employee attitude and morale.

Another area in which this kind of survey was developed was in the military services. The point discharge plan was worked out as one result of attitudes expressed by servicemen.

SURVEYS NOT LIMITED

Q. Is this type of opinion survey limited to members of the profession?

A. Indeed not. It is quite possible, and probable, that scientific inventories will be developed for determining the opinions of pupils with regard to the curriculum, teaching methods, and other appropriate topics. Also, community surveys to measure public opinion concerning schools can be utilized to a much greater extent than the sampling methods that are now employed.

Q. What hope is there that some real action will follow after inventories have been taken?

A. Industry and business have made use of these inventories to improve their personnel relations greatly. There's ample reason to believe that similar results will follow in the profession. After all, the greatest handicap to better morale—whether it's in business or in the professions—is the lack of knowledge as to where and what the problems are. Morale measurement locates these problems. Cooperation of school administration and the teaching profession can go a long way toward solving them.



A remedial reading teacher works with a small group of seventh graders at Bartlett Junior High in Philadelphia.

Philadelphia schools attack the

READING PROBLEM

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FOR many years the secondary schools of Philadelphia, like others, have been faced by the necessity of adjusting to an expanded pupil personnel that has included an increasing number of pupils of limited ability, that is, of limited ability or desire to do the things that have come to be thought of as the high school's work.

Many diverse suggestions were made for dealing with this situation. Out

of these developed a program later (1947) adopted by the Philadelphia Board of Education as the official program for the high schools. One of the major proposals for that program was that there be established remedial classes and services to reduce among pupils, to the extent that was feasible, the spread of ability to do satisfactory school work. After extended discussion, it was decided that this remedial

program would be most effective if it was related to pupils' ability to read. In other words, it seemed to those in charge of the schools that reading offered a high common denominator of school ability, a denominator that could be dealt with effectively and that could be used as a means of opening many phases of the school curriculum to critical scrutiny.

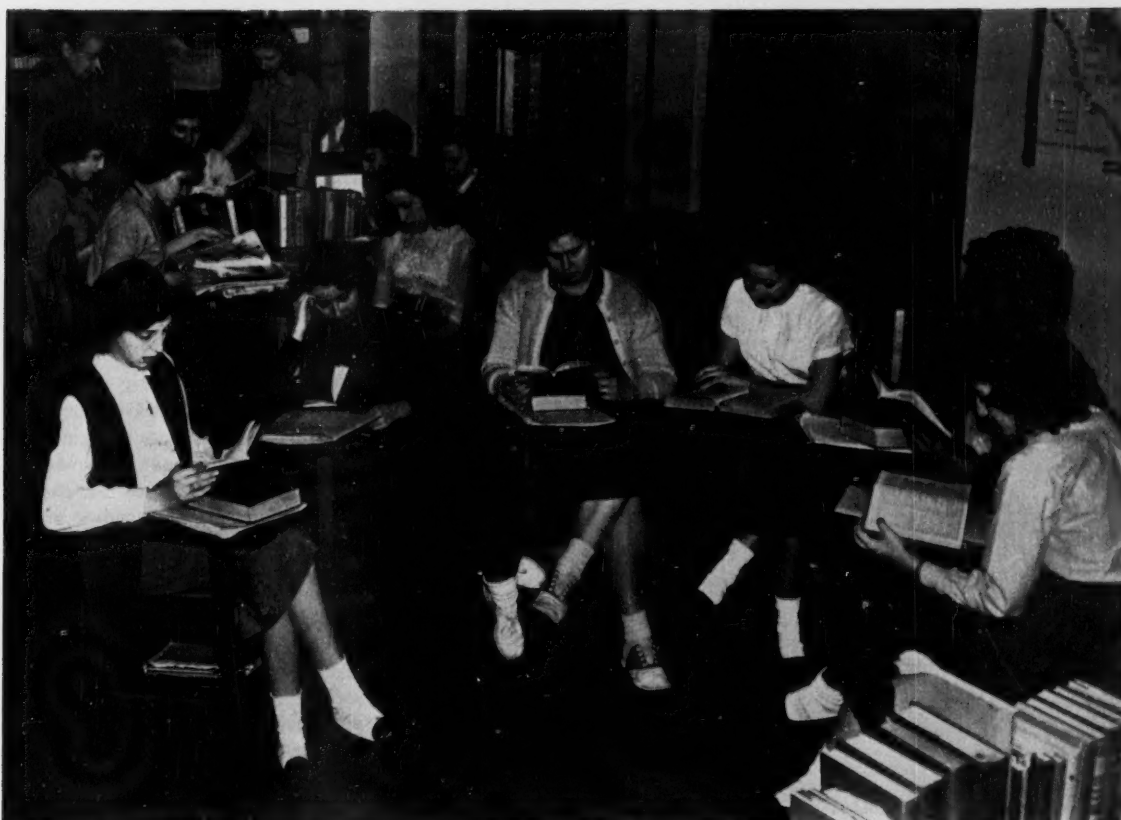
FRONTAL ATTACK

It was in 1948 that the decision was finally reached to make a vigorous frontal attack on these problems of reading at the secondary level in the 26 junior high, 17 senior high, and three vocational-technical schools of Philadelphia. At that time, such an undertaking on the scale which we envisioned was definitely a step forward into unknown and relatively uncharted territory. We were building our hopes around a reading program which was to be put into immediate effect in our schools, a program based on principles in which we firmly believed but which had not yet been put to the test of time. This article is, in effect, a report on the outcome of that "calculated risk." No longer a risk or an experiment, the Philadelphia reading program has become an integral part of the organization of our secondary schools and is now looked upon as a continuing service to students and faculty alike.

The basic principles upon which the work in the improvement of reading was established in our secondary schools were:

1. Reading programs were to be developed in the individual schools in relation to the particular needs of each school. Though there was to be general guidance and supervision of the program from the central curriculum office, principals and teachers in the schools were to exercise much initiative in planning and carrying out their specific programs.

2. The program was to have central office leadership and supervising service from a person in the curriculum office assigned this task. The person assigned this responsibility was



later given the status of "special assistant."

3. Teachers for the work were to be selected on a volunteer basis from the faculties of the schools in which they would undertake this new assignment.

4. The number of remedial reading teachers allotted each school was to be determined partly on the basis of need and partly by evidence of readiness to utilize effectively such service. These positions were to be established and maintained as additions to each school's regular allotment of teachers.

5. The teachers selected were to receive thorough and systematic training on school time in the fields of remedial and developmental reading.

6. The reading teachers during the first experimental term were to be free of regular roster assignments so that they, in conjunction with their principals, department heads, and other teachers, could plan the type of program best suited to the needs of the pupils and the general organization of the school.

7. The emphasis at the beginning was to be on remedial work with small groups of students selected on the basis of potentially average, or

The size of "reading improvement" classes is kept small so that special attention can be given to the problems of individuals and small groups.

better than average, ability but low achievement in reading.

8. A secondary but almost equal emphasis was to be placed on developmental work involving students and teachers of regular classes in a directed program designed to improve reading instruction in all subject fields.

9. An adequate supply of suitable materials was to be provided for use in the remedial classes.

10. A continuing program of in-service education for the remedial teachers was to be conducted.

WORK BEGUN

Using these principles as the basis for the inauguration of a widespread attack upon the reading problem, the secondary schools began actual work with the full-time assignment to the task of 45 teachers from such varied subject fields as English, social studies, science and common learnings.

In the five years since the beginning of the project, the number of teachers has been increased to 72, with relatively few changes in the original personnel except as members of that

group have become department heads, have been promoted to principalships or other administrative positions, or have retired from school service. To be more specific, 15 teachers of remedial reading have been promoted to administrative positions, as contrasted with three transfers to other schools and one retirement.

Each junior and senior high and vocational-technical school (with one exception) now has one or more reading teachers on its faculty. This means that each school has an experienced reading consultant qualified to give assistance on all-important questions relating to reading technics, testing, suitable materials, and the like.

Rather than looking far afield for nonexistent reading experts to teach our classes, we have capitalized upon the initiative and ability of persons who are really experts in understanding the particular problems of their schools. It was recognized that good human relations between the person in charge of the reading and the school faculty members is basic to the success of what is sought. Technical



Seventh graders at Bartlett Junior High School compare their progress in reading as they check their test scores, posted on a bulletin board.

qualifications have been acquired by the reading teachers over the years through the program of in-service training as well as through college courses, clinical work, attendance at reading institutes and conferences and similar professional activities. The combination of these factors has proved most successful and has shown, also, that the same kind of thing can be accomplished in any high school which can provide interested teachers and adequate training.

The remedial classes themselves have been organized on the basis of a maximum of 15 pupils meeting daily for at least one full term of five months and, in some serious cases, for a longer period. At the junior high school level, pupils are usually drawn from core classes; in senior high, the work is taken in place of English, and full major credit is given. Because of this fact and, more significantly, because the program is based upon the principle of the interrelatedness of the language arts of reading, writing and speaking, all these phases are included. There has been a growing tendency within the last few years to

call the classes "special English," or "reading improvement," rather than remedial or corrective.

Recommendations of pupils for the remedial groups come chiefly from classroom teachers and counselors, with the responsibility for the final selection resting with the reading teacher. In making this decision, he or she is guided not only by the subjective judgment of other teachers but by a study of the cumulative records of the pupils from first grade onward, by all available counseling and psychological records, by current test results (both reading achievement and non-language) and, most important of all, by a personal interview with the pupil and the administration of an informal reading inventory. In the senior high schools, particularly, an interesting recent development has been the fact that a number of pupils have, themselves, asked to be considered for assignment to these special classes.

Evaluation is carried on both objectively, through the administration of standardized tests at the beginning and end of the term, and subjectively, by the pupils themselves

writing on "What the Reading Class Has Meant to Me," by the comments of their other teachers, by teachers' noting differences in attitudes, personality, ability to tackle assignments, and success in various subject fields. The demonstrable growth based on reading test results has averaged two terms in one. Individuals, however, have made much greater gains in many instances, and, consistently, much improvement in general work and study habits and general attitude toward school has been noted.

SERVE AS LABORATORIES

Small remedial classes have, in many cases, served as laboratories for the observation of classroom teachers and for the development of technics of instruction applicable to regular class situations. They afford good proving grounds, also, for experimentation with materials of various types and the development of improved individual and group tests. The desirability of such a "test tube" in the individual schools is obvious and serves to implement our original purpose of "encouraging schools to exercise much initiative in planning and carrying out their specific programs."

With the assistance and under the direction of the remedial reading teachers, new schools have been added each term to the group of those engaged in some type of developmental work. These programs range from a junior high school in which all the pupils in seventh and eighth grades (the gifted as well as the slow learners) are receiving the kind of help in reading suited to their needs and abilities to a senior high school in which every member of a large English department is giving specific time and attention each week to reading improvement. In addition, the interest of department heads and teachers of other major subject fields is being aroused through in-service courses, distribution of tested bibliographies of "Easy Readings in Social Studies and Science," and the issuance of a manual dealing with such basic study skills as "reading for a purpose," "critical reading," "vocabulary building" and others. School librarians also are cooperating in many ways in furthering the aim of improving the quantity and quality of the supplementary and leisure reading activities of the students.

As we work toward the end of the fifth year of the Philadelphia secondary schools' comprehensive reading pro-

gram, the following truths seem to be emerging as self-evident:

1. The introduction and development of a good program for improving reading and reading instruction at the secondary level is a slow and gradual process. It must of necessity be that since definite changes in the attitudes of teachers toward their pupils and their work, in their technics of teaching, and in the materials which they use are involved.

2. Good and lasting results come only when administrators and teachers themselves recognize the need for help and are given the means (materials, counsel, technics, expert analysis) with which to work. Any superimposed program working "from the top down" seems doomed to as certain a failure as any other type of curriculum change so ordered.

3. No stigma is attached to "special reading" or "special English" classes in the minds of either teachers or pupils when the first two "truths" are accepted. Dislike of this type of special help for older pupils definitely stems from general misunderstanding of purposes and goals, both immediate and long-range, rather than from the work itself.

Improvement that has been demonstrated to parents, teachers, and pupils alike has led in our experience to requests for more, not less, of this type of work. For example, such comments from pupils as "My mother was very much surprised when I started to bring books home to read" or "I am much happier now that I can read better and so are my parents" are heartening.

ATTITUDE CHANGED

Others have expressed themselves in these ways, "Before I came to this room my attitude toward reading was very low. I would only read books if I had to, and when it was necessary I would just about get through it. But now since I have come to this room my attitude has changed. . . . Now I like to read and do more reading every day" or "My vocabulary was small before we worked on the different tests and books which were needed to help us. My vocabulary is not as large as I hope it will eventually be, but it certainly expanded. In my everyday speech I now notice mistakes which I once overlooked, and now I quickly correct myself. The dictionary, too, has become quite a friend. It is surprising how much



These seventh graders at Bartlett Junior High School find books they enjoy reading in the library corner of their remedial reading room.

more you know about yourself after you have been in such a small class." These and many other similar written reactions make us sure that the right approach removes the likelihood of stigma in relation to this special work.

4. The problem of suitable easy materials for adolescents is not the insurmountable barrier that some have maintained it is. Imagination, coupled with a great deal of past and continuing research in this field, has yielded an encouraging number of good workbooks and fugitive and original materials of many types.

5. If the principal and the teachers of remedial reading work continuously to make the classes in reading a total school program in which everyone shares, that type of program can increasingly be attained. If the administration and teachers do not continuously seek to maintain such a broad program the work will become pigeonholed as a special and expensive service to a handful of pupils.

6. The value of practical, "on-the-spot" training of remedial and classroom teachers has again been proved. When demonstration work with indi-

viduals and entire classes carried on in the schools themselves as a part of the regular program is combined with meetings of small groups of teachers for discussion and evaluation the results are almost certain to be effective and lasting.

7. In a truly developmental program such as ours, the day that we feel that we have all the answers to reading problems at the secondary level is the day that the work will cease to be effective. The more we work in the field, the more we realize the potentialities for growth and development not only in the fairly restricted field of reading but also in the broader field of curriculum change in the secondary school. It might well be that in seeking one thing we shall find another of even greater significance—better ways to work with those many pupils who find the conventional high school program so unrewarding and so frustrating. Whether or not that aim is achieved, we have been encouraged to feel that something exciting is happening "in the minds of many teachers" which can only be good for the future of our secondary schools.

HOW SUPERINTENDENTS GROW

through in-service opportunities

CHANGES in the nature of the in-service opportunities open to school administrators are occurring rapidly today. Official recognition by the A.A.S.A. that a traditional, limited view of in-service education was behind today's times was responsible for the formation of the Cooperative Program in Educational Administration.

Recent research at the Southwest regional center of the C.P.E.A. has provided a look at today's in-service picture and suggests desirable changes in the existing pattern. This research centered on the judgments of superintendents in Texas regarding use, value and availability of the recognized means of in-service growth. According to the superintendents, there's plenty of repair work to be done on today's prevailing pattern of in-service education to bring a better balance between needs and resources.

Agencies which serve the school superintendent should recognize that, in the past, by far the greatest portion of the school superintendent's in-service education has been related only to individual study and the lessons that came from experience. School administrators are now asking for expert help on a variety of new and perplexing problems. But many of the conventional sources are failing to adjust their offerings to meet today's demands. Particularly is this true, superintendents say, with colleges and their continued reliance on formal, degree-oriented courses and theses.

Judgments of the superintendents regarding means of in-service growth were obtained by the use of a check list that presented a short description of 35 resources and activities of the superintendent that are considered to make a contribution to his in-service education. This list, prepared from interviews with administrators and from the professional literature, is presented in Table 1. Each superintendent reacted to each item in terms

HOLLIS A. MOORE Jr.

of frequency of use, value which he had received, and extent to which each means was available to him when needed.

In general, the most widely used means of growth were not those which superintendents had found to be most dependable in helping with all problems. Some of the most frequently used media were, as a matter of fact, considered to be of quite limited value. Specifically, the superintendents considered their participation in service clubs in the community, contact with bookmen and school supply salesmen, and speeches by outstanding educators as activities that are widely engaged in but that have little to offer in terms of in-service education. It may be, for example, that superintendents participate in community service clubs for reasons other than to find any real help in the solution of school-community problems.

SIX OPPORTUNITIES

Of the six opportunities for in-service growth which were used most frequently, and therefore can be said to be the source of much of the in-service education that has been acquired in recent years, none was directly related to the influence of colleges. Except for conferences sponsored by the state department of education, the superintendents did not

rely on initiative from any source other than themselves for the in-service activities in which they most often engaged.

Further evidence on use of resources is provided by another part of the C.P.E.A. research. Superintendents were asked to identify those functions of their job in which they had experienced significant growth in recent years. (These findings were reported in the first article of this series, published in April.) At the same time they were asked to credit the source of in-service help that made such growth possible. Given three "sources" from which to select, superintendents overwhelmingly mentioned individual study. The percentage of checks for each source was: individual study and experience on the job, 53.7 per cent; contacts with other persons (conferences, committees), 28.9 per cent, and contacts with institutions (courses, workshops, theses), 17.4 per cent.

Fourteen of the items listed in Table 1 can be said to have been used occasionally. The 15 means most infrequently used were largely those in which the superintendent could engage only by invitation. The superintendents' initiative in these cases was not sufficient.

What means of growth do superintendents consider to be helpful in solving virtually all problems that arise? Data in Table 2 indicate that activities which bring administrators into contact with one another in work-

Extensive research on the in-service education of school superintendents, sponsored by the Southwestern C.P.E.A. at the University of Texas, is the source for a series of articles exclusive to The Nation's Schools. This second discussion reports the activities which make up administrators' in-service education.

Table 1—The Means Used by School Administrators for In-Service Improvement

	FREQUENTLY USED*		AVAILABLE WHEN NEEDED†	
	RANK	PER CENT	RANK	PER CENT
Reading in professional journals.....	1	81.4	6	61.3
Actively working in community service clubs	2	74.3	7	60.7
Participating in regional schoolmen's club.....	3	65.4	10	52.7
Attending short conferences sponsored by state departments of education	4	63.3	8	57.0
Reading printed accounts of successful ways in which a problem has been met.....	5	59.6	15	46.5
Listening to addresses by outstanding educators.....	6	58.9	23	36.2
Visiting other school systems.....	7	49.4	1	74.5
Conferring with bookmen and school supply salesmen.....	8	48.0	18	40.4
Attending summer workshops on college campuses.....	9	47.8	3	63.9
Taking summer school courses leading to advanced degrees.....	10	44.5	9	54.3
Attending national conventions for school administrators.....	11	43.4	22	36.5
Forming self-study committee composed of local faculty members.....	12	41.2	2	69.0
Independent reading of education books.....	13	40.5	12	49.3
Conducting research in own school system	14	38.8	4	63.3
Studying results of surveys by professionally trained persons.....	15	34.4	26	28.2
Applying evaluative criteria in own school system.....	16	34.0	5	62.5
Serving as member of visiting team using evaluative criteria in other school systems.....	17.5	27.2	21	36.6
Independent reading of non-education books.....	17.5	27.2	19	39.3
Taking extension credit courses.....	19	25.8	13	48.3
Discussing a specific problem face to face with a member of college faculty.....	20	23.7	11	50.5
Participating in clinics conducted by school system interested in exploring possible answers to a particular problem.....	21	23.3	25	30.2
Taking short-term credit courses.....	22	23.0	16	43.7
Serving on a study committee of a professional organization.....	23	20.8	28	24.9
Employing college faculty member as consultant for continuous visits over a period of at least a year.....	24	18.4	24	35.0
Using lay committees for advice on administrative problems.....	25	16.9	14	48.0
Serving as member of a survey staff.....	26	14.6	32	18.6
Employing college faculty member as consultant for one visit in school system.....	27	13.6	20	38.5
Using reading lists supplied by some agency or college.....	28	10.3	27	28.0
Writing a thesis.....	29	10.0	29	23.5
Taking correspondence courses.....	30	9.1	17	41.9
Participating in sponsored tours arranged by some agency.....	31	8.7	34	15.0
Serving as member of an advisory committee to state department of education.....	32	8.6	31	19.8
Teaching in college.....	33	8.2	33	15.7
Employing consultant from business or industry.....	34	4.7	30	20.4
Serving as member of an advisory committee to a college.....	35	4.4	35	11.5

*These two columns are based on the responses of 335 superintendents who checked "frequently" with respect to use of each of the means of growth listed. The remainder of superintendents checked either "occasionally" or "never."

†These two columns are based on the responses of the superintendents who checked "I have found this to be available when a need for it has arisen."

The remainder of the 335 superintendents responding checked one of the possible

two other reactions "Practical difficulties often arise in trying to apply this means and tend to limit its availability." "This may be a means of in-service growth, but I have never found it to be available for my use."

shops, clinics and conferences are of considerable value. Similarly, the administrators judged cooperative enterprises within the local school staff—study committees, clinics and systematic evaluations—as significant contributions to administrators' in-service improvement.

Judging each item in terms of "always gets results," the superintendents picked summer workshops on college campuses as the most valuable means of in-service growth. A correspondingly low opinion concerning summer school courses leading to an advanced degree is an indication of the direction which school superintendents would have colleges follow as they offer their services to school administrators.

UNSUCCESSFUL ATTEMPT

Workshops are geared to administrators' problems; credit courses, too often, are geared to the college's degree requirements. The value of writing a thesis was held in even lower regard. Furthermore, the attempt by colleges to meet the needs of school administrators in the field by offering extension credit courses has obviously not been successful in the eyes of the superintendents: Only one out of 10 considers such courses to be really valuable.

Most of the means of growth that are most valuable appear to be satisfactorily available to the superintendent when he needs them. In spite of the fact that superintendents admit the easy accessibility and the value of these

means, these are not the resources (workshops, local cooperative enterprises and interschool visitation) most often used. The expanded use of these resources is a challenge squarely up to the superintendent, since availability is not a deterrent.

A few of the in-service resources, however, that are considered to be highly valuable are not sufficiently available to the superintendent when he needs them. This presents a direct challenge to the agencies purporting to serve the school administrator. Opportunities should be available for superintendents to serve as members of survey staffs, to serve on study committees of professional organizations, and to participate in educational clinics conducted by local school systems which are interested in exploring possible answers to one particular problem.

The Texas superintendents reported that they received relatively little in-service help from established community contacts. There was no general acceptance of lay advisory committees as a valuable means of professional growth for the superintendent. Possibly even those superintendents who consider lay advisory committees and other structured community contacts to be highly desirable from some standpoints still do not consider these as means to further their own in-service growth. Only 15 per cent of the superintendents, for example, considered lay advisory committees to be of extremely high value.

Close examination of Table 2 should give considerable encouragement to the school superintendent who feels that his opportunities for in-service growth are curtailed because of geographic isolation from population centers and from recognized graduate schools of education. Data in this table indicate that superintendents believe the most valuable in-service opportunities are those that are inherent in the local school situation and that ask only for the superintendent's initiative in utilizing faculty committees, local research, evaluative instruments, and local educational clinics. All of these lie within the realm of possibility for virtually all school administrators.

READING EFFECTIVE

It is significant from the data that the most widely used means of growth, reading in the professional journals, was selected by approximately three-fourths of the superintendents as "effective in dealing with some problems but not with others." Similar endorsement was also given for "reading printed accounts of successful ways in which a problem has been met." Because of its contribution in presenting promising practices and in suggesting new frontiers in education, the current professional literature is a fundamental part of the in-service education of almost all administrators.

It is probably significant that no one item in the list of means of in-service growth was judged by more than half of the superintendents to be truly effective in helping him deal with all problems with which he is faced. Indeed it is somewhat amazing that half of these superintendents would consider that any one medium was effective with all problems, as they have said in regard to summer workshops.

As expected, the media judged to be available on call were primarily those that could be carried on in the local school system or at least within easy proximity. This is encouraging, however, when it is considered that the means judged to be most available are likewise those that have so far proved to be of most value.

There is a whole new area of in-service opportunities that seems now to be available only to the very few. This area is represented by most of the last 12 items in Table 1. Response by the superintendents seems to label this as the "unexplored territory" of

Table 2—Most Valuable Means of In-Service Growth

	ALWAYS GETS RESULTS*
Attending summer workshops on college campus.....	50.0
Visiting other school systems.....	45.4
Forming self-study committees composed of local faculty members.....	42.4
Attending short conferences sponsored by state department of education.....	42.3
Applying evaluative instrument in own system.....	35.4
Conducting research in own system.....	35.1
Participating in regional schoolmen's clubs.....	34.7
Participating in clinics conducted by a school system around one particular problem.....	30.8

*The per cent of superintendents who checked "In dealing with almost all problems this technic is excellent; it gets results."

The remainder of checks for any item were distributed among the three other pos-

sible responses: "This is effective in dealing with some problems, but not with others," "This cannot be depended on for results, although occasionally it is effective to a limited degree," "This usually is a dud in helping solve our problems."

the in-service education of the school administrator. These are activities which the superintendent can engage in primarily by invitation; for example, as a member of a survey staff, as a member of an advisory committee to various groups, as a college summer school teacher. Exploration of this relatively undeveloped field may be a part of the emerging pattern of in-service education for administrators.

RECOMMENDATIONS MADE

What do all these data mean in terms of desirable changes toward improvement of school administrators' professional growth? What trends can be projected that will be a part of a more effective and versatile program of in-service education? A number of recommendations seem to be justified by these findings.

1. Each of the several in-service media should discover the special contributions it has to make in meeting the in-service needs of school administrators. Speaking negatively, no one of the means of growth should try to be all things to all administrators. Specifically, through those means that are now, or easily can be, used widely and are also judged to be effective sources of help (such as statewide conferences, workshops, and other undertakings involving numbers of administrators) greatest effort should be made to solve the most prevalent problems faced by school administrators. As noted in the first article of the series, problems relating to the community and to instructional leadership were most universal.

It was noted in the first article of this series that while some problems are prevalent for superintendents everywhere, others, such as school construction, business management, maintenance, and communications with staff, occur infrequently but are important in those special situations. On those in-service means that are based on individual election and that reach less than the total group of administrators should rest primary responsibility for these less prevalent problems. Problems of wide prevalence should be placed on the agenda of professional conferences and conventions, and professional associations might well give attention to these items in planning their research efforts. College courses and books should still give help in the problems important only to a limited number of superintendents.

2. Colleges should adopt a method by which the continued advice of superintendents on the contribution of colleges to in-service education can be guaranteed. An advisory committee of representative administrators can probably best keep college offerings in tune with current problems and needs.

3. Opportunities for cooperative undertakings among administrators should be enlarged. To leave the administrator to individual study and experience only is an inadequate way to meet the problem. Contact with colleagues is a source of new ideas and a way of checking the soundness of local experiments. Schoolmaster clubs, professional associations (state and substate), and study councils should be expanded to offer services and active participation to all administrators. Action research on urgent concerns of the members should be a core purpose of such organizations.

4. Colleges preparing school administrators should devote attention to the development of a philosophy of professional growth, a favorable disposition for continued study and research, and the personal incentive to carry on in-service education as a planned program. Prospective administrators should, in college, become acquainted with the many avenues of growth which are available to practicing school administrators.

5. New resources for solving community related problems must be found. Welfare, research and business agencies not now thought of as sources of in-service education for school administrators may offer real service in the years ahead. The fact that all highly regarded means of growth today are intraprofessional may be one reason "community" problems loom so large. Citizens committees may be of particular benefit in the long-range planning phase of the administrators' job. Attention to community problems by colleges will mean wide utilization of staff personnel outside the limited field of education.

6. It seems apparent that as far as in-service education of the administrator is concerned complete reliance on one kind of in-service activity is not wise. Some in-service media make their primary contribution in a particular problem area of administration. In considering the total approach to the in-service education of the school administrator, then, it seems necessary that all of the agencies and institutions

concerned should work together closely and each should emphasize that phase of the superintendent's education that it can most effectively serve. This forecasts considerable policy directing by the administrators themselves and suggests increased use of advisory groups made up of those persons for whom the in-service offerings are being made.

7. Since many urgent problems are prevalent among all superintendents, the cooperative rather than the individual approach to their solution should be expanded. Colleges, associations and other agencies serving large numbers of administrators could well afford to devote attention to the creation of cooperative means for in-service growth. The school study council movement appears to be a step in this direction. Down-to-earth college sponsored workshops, based on administrators' real problems, are another bright spot in that picture.

SUPERINTENDENTS' RESPONSIBILITY

A summary view of the data shows that here and there are in-service opportunities which have much to offer but whose availability needs to be improved. Primarily, however, the most valuable in-service aids are available on call, and responsibility for complete utilization rests squarely on the administrators themselves, who admit the habit of relying often on some sources which have not proved to be of continued value.

This study has indicated that the in-service education of school administrators comes from many sources. It is a real task for the administrator to cut through his daily routine and use these opportunities to full advantage. Undoubtedly, a large part of any administrator's learning almost automatically occurs as he struggles with day-to-day problems. An important amount of real professional growth comes simply as a by-product of successfully arriving at solutions, or what may appear to be solutions, to problems that he meets every day in the course of his work.

At the same time, a superintendent's own growth is too important a matter to be left entirely to chance. Some sort of careful planning on his part, and on the part of the many agencies serving school administrators, has to take place. A discussion of the incentives which lead to professional growth will be presented in the June issue of *The Nation's Schools*.

SHOULD CUSTODIANS WEAR UNIFORMS?

SCHOOL OPINION POLL

Should the school board request custodians to wear uniforms?

No 58%

Yes 42%

DEMOCRATIC personnel administration and sympathetic human relations are apparently right at the surface of the thinking of U.S. school superintendents. Even the question of uniforms for school custodians arouses such comments as "group discrimination," "authoritarian," "machine age philosophy," and "downright un-American."

Returns from a cross section of the nation's school superintendents show a majority opposed to a school board request that custodians wear uniforms. The NATION'S SCHOOLS opinion poll was mailed to 500 school administrators selected at random from each state. Respondents voting "yes" were asked to describe under what circumstances such a request should be made. Most of the returned questionnaires included comments in addition to the description of the circumstances in which this policy would be acceptable.

In general the two positions can be summarized something like this: Those who favor uniforms for custodians do so primarily because of the public relations values which come from custodians displaying a neat appearance. The administrators who oppose such a plan do so because of a feeling that such a special requirement would create an unfavorable servant-class philosophy. Each side insists that its position is on the side of improved morale for custodians.

There is general agreement that such a request should be made only when the school district is willing to bear most, if not all, of the cost involved. Furthermore, opinion seems to say that this is more of a big city proposition and that it has relatively little significance for the one or two custodian school.

On the "yes" side many of the choices were made with the reserva-

tion that the word "request" should be underlined and should not imply rigid requirements. A number of superintendents specified that uniforms should be necessary only during school hours or at times when school facilities are being used by community groups. With an eye to prospective laundry bills, many of the superintendents were adamant here and now that custodians must not wear uniforms when working on the boiler!

The affirmative attitude was illustrated by the superintendent who said: "This would be a part of the general upgrading effort now being carried on in this field. We need to eliminate the instances of rag-tag clothing worn just because it is a dirty job." Some of the superintendents admit they are just hoping, but they are willing to try uniforms as a way to give dignity to the job, to put the school's best public relations foot forward, and to create models of neatness that will be important to the pupils.

STANDARD DRESS FAVORED

There was some feeling that the uniforms should not be à la policemen, doormen and navy lieutenants, but should simply be a standard type of dress such as gray shirt and blue trousers.

One superintendent turned the questionnaire over to his head custodian to be answered. The answer: "A great idea, and not only uniforms but a service bar or pin to designate years of service."

"I don't think custodians' dress needs to be any more uniform than what they eat, drink, see, feel and think." This is typical of the comments of superintendents who "went to bat" for their custodians as staff members who deserve all the freedom of any other school employee—and that apparently

means a purple shirt with green britches, if they so desire.

"Why custodians?" they asked. "Why not a special garb also for teachers and pupils?" Superintendents responding No showed their complete disapproval of any move to distinguish custodians from other school personnel.

Apparently anticipating the arguments to be presented by the other side, many who answered No argued that there is no proof that uniforms would increase efficiency and certainly none that they would improve morale. "Besides," said one superintendent, "what makes anyone think that wearing a uniform ensures neatness?" Admitting that custodial service still has a few unsolved problems, they deny that solutions to these problems can be found in new and strange regulations.

Undoubtedly this is not the issue upon which hangs the future of American education, but the 58 to 42 vote and the comments from the many superintendents indicate that issues are involved here which apparently go beneath the surface. One of the trends that shows up between the lines is an awareness by the superintendents that the school custodian is an important member of the school family, from the standpoint of public relations, efficient school management, and influence on the children. Whatever changes are anticipated in the job requirements for the custodians will apparently be made in full recognition of the importance of this group to the school program.

* * *

The June issue of The NATION'S SCHOOLS will report opinion on the question, "Should revenue for school districts come partly from local tax sources other than real property?"

Clothing laboratory at Freeport Junior High School, Freeport, Ill., has storage cabinets for projects and equipment on two walls. A fine patterned wallpaper above the case work is in keeping with the activities carried on in the room. The even lighting on the pattern and cutting tables and the sewing machines is essential. Childs and Smith of Chicago were the architects and engineers.



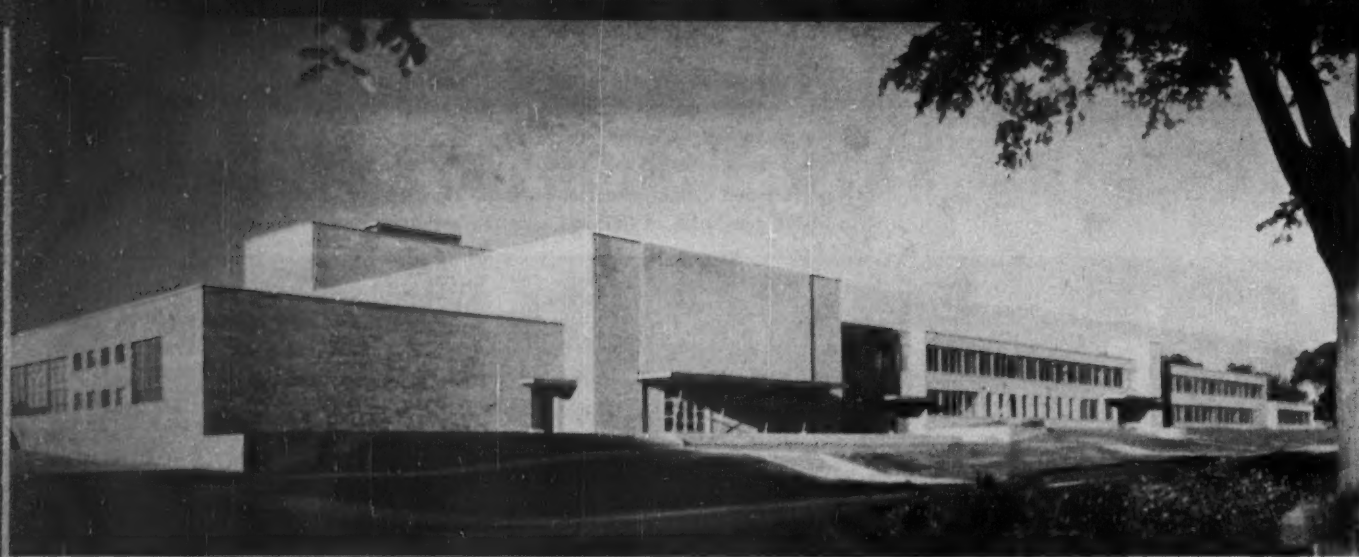
S c h o o l h o u s e p l a n n i n g

Junior High meets needs
of individual pupils

B. F. Shafer
Avery Jacobek

Ground reflection in
daylighting

J. W. Griffith
O. F. Wenzler
E. O. Conover



JUNIOR HIGH

*designed to meet the needs
of individual pupils*

B. F. SHAFER

Superintendent of Schools, Freeport, Ill.

THE new Freeport Junior High School is located on a 38 acre site and just across the street from our senior high school, which is on a 25 acre site. We have an excellent opportunity to develop the junior college plan and have a K-6-3-5 organization, or after adding a few rooms to the junior high school a K-6-4-4 plan of organization. The building is located at about the center of the south side of our school district, and no pupil lives more than two miles from the school.

Freeport, like many other communities, began its junior high school program many years ago by building a new senior high school and moving the seventh and eighth grades into the old senior high school. Thus the educational program was limited by the fact that we had only seventh and eighth grades and an old building

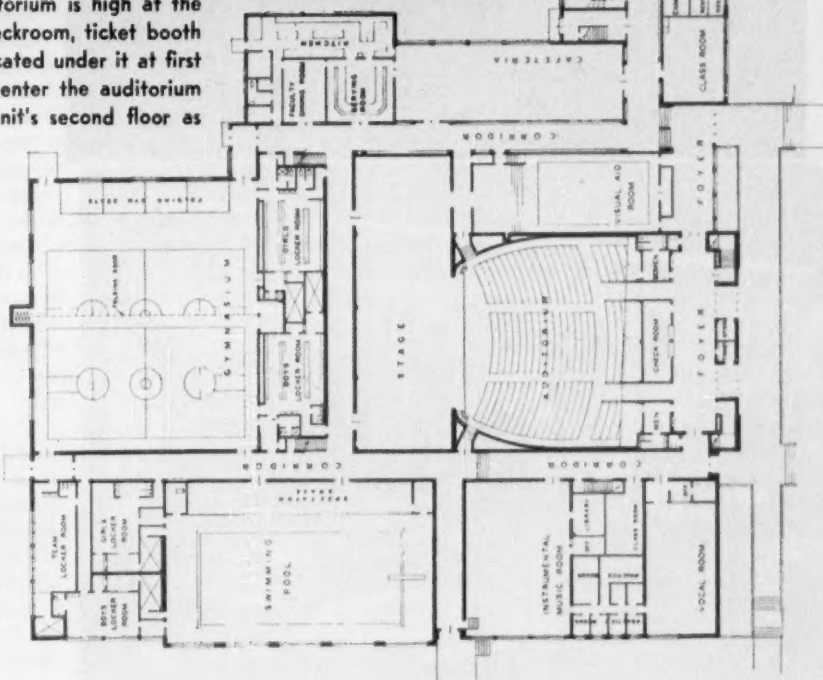


This junior high school was not designed as a miniature high school; from the beginning it was planned to meet the needs of the boys and girls of Freeport who will attend it.



Above: The floor of the auditorium is high at the rear; this allows the foyer, checkroom, ticket booth and public restrooms to be located under it at first floor level. The students can enter the auditorium directly from the academic unit's second floor as well as from the first floor.

Opposite Page: Top and center are exterior views of the Freeport Junior High School. Picture at bottom is of the academic foyer, which leads into the library. The foyer has plastic wallpaper, asphalt tile floors, fluorescent lighting, colorful draperies.



MAIN FLOOR PLAN



Top: This is one of the two serving counters in the cafeteria. The equipment in the foreground, from left to right, includes: cold pan for bottle goods; double dry display rack; steam table.

which had been built for a senior high school some 50 years previously. This development, I believe, is typical of many communities in the Middle West, if not throughout the nation.

At the beginning of the century, educators and laymen alike began to realize the need for general education at least through the 16th year and the desirability of a high school education for all. We began to look at our schools and to evaluate them in terms of the extent to which they were meeting the needs of children and youth. These evaluations showed clearly that our schools, especially above the sixth grade, were not adapted to the needs or interests of pupils or the democratic society which sponsors and supports them. A great exodus from our schools began at the end of the sixth grade and continued throughout the later grades, with a notable increase at the end of the eighth grade.

To meet this situation, the junior high school, housing Grades 7, 8 and 9, was organized. The junior high school is the one institution in our public schools that was organized to minister to the needs, abilities and interests of a particular age group as well as to the needs of society. It is in this respect that the junior high school has had a marked influence on both the elementary schools and the senior high schools, which had been concentrating on the needs of society to the neglect of the individual. Democracy stakes its faith in the value of the individual and the contribution that he can make to society.

After a careful study, in which many groups participated, it was decided



Center: This living room is part of the home economics department. **Bottom:** The library has recessed fluorescent lighting, an acoustical ceiling, wallpaper, draperies and venetian blinds. The tables can be used for group instruction and study.



that the educational program that our new building should house must provide for the continued development of the fundamental skills and understandings in the language arts, social science, mathematics, natural science, arts and health (minimum essentials or core subjects, depending on the vocabulary you wish to use). The program also should provide exploratory courses and opportunities to try out special interests and abilities and to give pupils a chance to know and understand themselves better.

Having decided the nature of the educational program in rather broad general terms, we drew up our more specific building needs. We assumed an enrollment of 900 pupils in Grades 7, 8, and 9 and that the daily schedule would be made up of six 55 minute periods. By the time the architect was ready to begin the preliminary sketches we were able to supply him with a statement of the various space areas needed and the sizes of these areas.

AREAS NEEDED

These were listed somewhat as follows: standardized classrooms as needed for language arts, mathematics, and so forth; arts and crafts; industrial arts or shops; homemaking; science rooms; auditorium; instrumental and vocal music with practice rooms; office; pupil personnel areas and health clinic; library; visual aid and auxiliary services; physical education, including gymnasium, auxiliary gymnasium, swimming pool, and team room; pupil conference and activity areas; cafeteria, and storage or receiving room.

In our planning it was recognized that the arts, crafts, industrial arts or general shops and the homemaking department have much in common. These activities should be so located as to facilitate an exchange of ideas on the part of teachers and to enable the students to utilize the services of the various departments in the completion of a project. That this might be accomplished, these departments are located in the one-story west wing of the building.

The location of these departments at one end of the academic part of the building and the physical education and music departments at the other end helps to regulate the traffic in the corridors between class periods. When classes pass there is always a large exchange of pupils between the academic area and the other departments of the school. Likewise, access

to the auditorium from both the first and second floors makes for an even flow of traffic to and from assembly periods.

If the junior high school is going to fulfill its purposes it must meet the needs of the individual student, and some of these needs are quite personal. This calls for ample administrative, guidance, conference and health areas. The administrative area, consisting of the principal's office, the assistant principal's office, the waiting room and clerical space, is separate but still connected with the guidance area. The guidance area has its own waiting room, which leads to the offices of the boys' and girls' counselors and the offices of the speech correctionist and the school nurse. There is also a student conference room on the second floor.

It may appear that the auditorium, physical education, and music areas are somewhat overdone. This is not the case as the senior high school, which is just across the street, uses the auditorium and also the swimming pool two days per week. The high school orchestra uses the instrumental music room.

The junior high school seems to be moving away from rigid departmental-

ization. Classroom procedure includes activities and movements radically different from the old type of lesson assigning, lesson hearing technic. There are no small classrooms. The standardized classrooms vary in size from 41 feet 9 inches by 23 feet to 31 feet 2 inches by 23 feet, with most of them near the larger size. Each room is equipped with a teacher's desk, teacher's wardrobe with book and supply cases, a two drawer file, 32 individual tables and chairs, and one work table 30 by 60 inches, with three extra chairs. In addition, there are the usual chalkboard and bulletin board found in any modern classroom.

Much study was given to the relative location of the different areas. The detailed arrangement and equipment of the various areas was determined after numerous conferences between the teachers and the architect. After the plans were turned over to the contractors for bidding only minor changes were made. Thus we were able to plan the kind of a building we needed for our educational program and were able to build it without alterations. It is a complete unit, and, after occupying it for one year, we are more than pleased with the way in which the building fits the program.

Architect's Description

AVERY JACOBK

Childs & Smith, Architects and Engineers, Chicago

THE development of a modern, pleasing structure is but a small part of the program involved in the designing of a successful junior high school. A junior high school plant is no longer a miniature high school as it was once considered to be, nor is it a string of odd shaped classrooms grouped together in such manner as to present an interesting façade. Junior high schools have now been recognized as a prime factor in the exploration and development of the adolescents' interests and personalities.

It is necessary that the completed structure provide activity areas of sufficient size and quantity to embrace the educational program in such a way that the activities in each department may be carried on comfortably with-

out conflicting with other activities. Environment is of utmost importance in the development of character and personality; therefore a pleasing atmosphere must be created. The maintenance of the building for years to come is another important factor in the designing of the building; durable materials must be suggested in the initial planning. If these goals are to be achieved, it is obvious that close cooperation between educators and architect is essential.

Like most other boards of education, the board at Freeport, Ill., had only a limited amount of money to spend for its new schools. The bond issue amount was \$2,395,000 for a new junior high school and two elementary schools. This amount was ap-

proved to include equipment, site development, and fees. Money should not be spent for expensive "frills," such as cornices, sculpture or pitched roof, and buildings should be "streamlined" to simplify construction. The demand was not for "cheap" buildings but for practical, durable and economical buildings. The answer to this demand could only be: Compact plans, sound yet inexpensive building materials and construction methods, and the use of color for richness and beauty.

In general this means that interdepartmental use and student travel must be carefully considered. More specifically: In the Freeport Junior High School much of the pupil traffic problem has been solved by locating the large pupil participation areas at either end of the so-called "academic unit." The two-story academic unit serves as the "hub" of pupil traffic, thus enabling pupils to attend class in the academic area, visit their lockers, and then proceed to special departments to the east or to the west. Not all traffic goes at the same time to the east or the west.

Much consideration must be given to the planning of an administrative section for a junior high school, since emphasis at this age level should be placed upon student guidance. Administrative offices can no longer consist merely of a clerical office and a principal's office. Facilities should be provided for offices for a guidance director and/or deans, speech correction

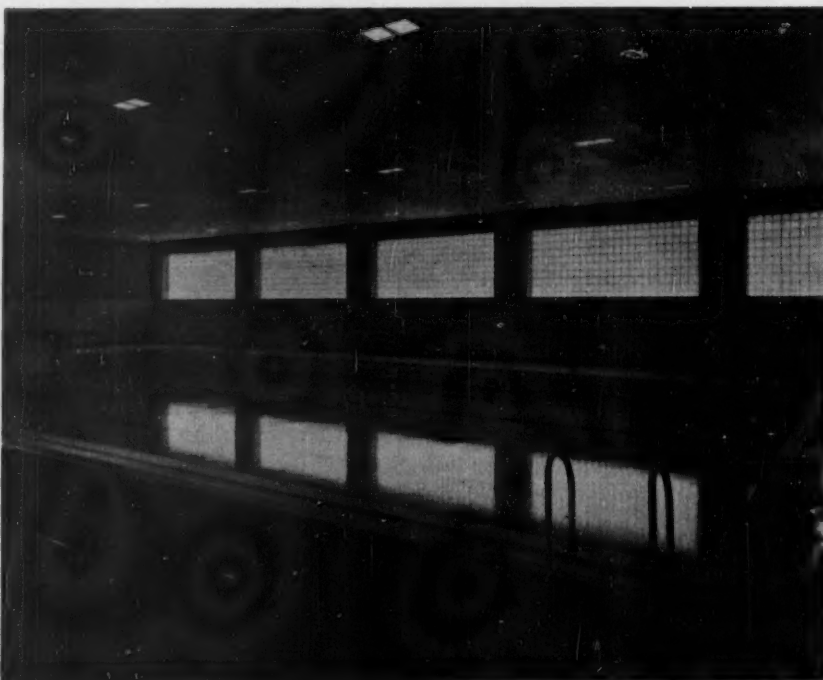
personnel, conference rooms, and medical, dental and health facilities.

Adjacent to the administrative wing of the Freeport Junior High School is a classroom that can be used for additional services.

The homemaking, art, crafts and industrial arts areas are located adjacent to a driveway and parking area so that deliveries to each can easily be made. This arrangement is excellent for evening classes; the entire building need not be opened for such classes. Coordination between these depart-

ments (which is desirable) is made possible by this proximity. Machine noises and food odors do not enter the academic unit.

The cafeteria is rather centrally located and is easily accessible from all areas. The faculty dining room is located so that faculty members may pass through the cafeteria serving line or enter the dining room directly and be served from food carts in the dining room. The cafeteria is used for after-school parties, dances and so forth and can be closed off from the



Above: Swimming pool and decks are ceramic tile; walls are cement plaster above glazed tile wainscot; deck for spectators is terrazzo; there are glass block panels in the room's outside wall.



Left: This is the boys' side of the gymnasium. The large door (left side of picture) is partly opened to show the girls' half of the gymnasium.



Above: This is a typical junior high classroom. Right: In the foods laboratory are modern, compact units that are designed for learning, practice and supervision.

remainder of the building by folding gates.

The music department is located so that it may also be used independently after school and during vacation periods and so that the music will not be heard in the classroom areas. The music rooms are adjacent to the other areas music students will be using frequently, such as the auditorium, the stage, and the gymnasium. An outdoor exit to the loading dock that serves the stage is also helpful when the band is to be transported.

The gymnasium consists of two full size junior high school basketball playing courts that are separated by an electrically operated, soundproof door. One playing court will serve the girls



and one the boys, with locker and shower areas adjoining. When the door is opened a court in the center of the floor area may be used for intramural games, with spectators sitting on roll-away bleachers on each side of the court. Not more than 1200 to 1500 spectator seats will be required for the junior high school games; the size of the gymnasium was not increased to allow spectator use. The gymnasium classes will go directly out of the building (to the south) to outdoor play areas and will not pass study areas. Storage areas, offices, showers and toilet facilities have been provided for the instructors.

In order that the state requirements for physical education could be met, a third physical education area had to be provided. The people of Freeport wanted a swimming pool, since they have never had one in the school system. The pool has five regulation lanes and is 35 by 75 feet, with adequate deck and spectator areas. The locker rooms and shower areas are separate from those of the gymnasium so that all three areas can be used for class instruction every period of the day. The swimming pool area is also arranged so that it can be closed off from the main building and used evenings and week ends if desired.

ACTIVITY ROOM PROVIDED

A large "student activity room" has been provided over the locker and shower rooms. This area is used for athletics, games, dances and social gatherings after school. The University of Illinois strongly recommended this type of "all-student" area in its survey report on the school housing needs at Freeport.

One of the requirements of a well rounded educational program is access to a well equipped auditorium. This was especially true in Freeport, since the high school does not have facilities of this type. Therefore, the auditorium was located directly across the street from the high school and will be used by both junior high and senior high students. The auditorium will seat 990 in comfortable opera chairs; a greater seating capacity was desired, but this was impossible because of the high costs involved in balcony construction. Simplicity of design, with emphasis on the stage, lighting and color have made the auditorium outstanding yet economical.

The acoustics in the auditorium is said to be outstanding, because of the

shape of the room, the ceiling troffers, and the acoustical plaster walls. The ceiling is sand finished plaster, to provide a textured surface, with catwalks above for servicing of lights.

The stage is 35 feet deep with the proscenium opening 50 feet wide to allow for band and vocal use. The total stage length is 110 feet. The stage has a high scene loft so that counter-weighted curtains, downlights, border lights, and so forth can be raised out of view when not in use. The width of the proscenium can easily be reduced for dramatic and other programs by the use of curtains, side cyclorama, and tormentors. Additional stage lighting has been provided in a troffer in the auditorium ceiling, with dimmer equipment available for all lighting.

SERVES MANY PURPOSES

A name for the visual aid room is rather hard to find since it will serve many purposes. The room will seat 225 persons; it has an asphalt tile floor that slopes to the front of the stage. The walls are lightweight concrete block painted in pastel colors, and the ceiling is acoustical tile with recessed incandescent lighting. The room will be used for movies, speech, television, broadcasting and recording. Metal folding gates have been recessed into the corridor walls to permit the use of the auditorium section in the evenings without the entire building's being opened.

When the enrollment increases to more than 1000 it will be necessary to expand the academic unit and the industrial arts unit. The industrial arts unit will be expanded to the south, and classrooms will be added at the west end of the building, first on the second floor over the art and crafts rooms and then in a two-story wing to the west. All other areas will be adequate for increased enrollment.

The exterior of the building is face brick and stone with steel sash to the north and directional glass block and steel sash vision strips to the south, east and west.

The academic portion of the building is structural steel frame construction with bar joists supporting the concrete second floor and the poured gypsum roof deck. The first floor is constructed of reinforced concrete.

Stairways are steel pan construction with asphalt tile treads and landings. Walls are of hard burned yellow face brick.

The heating plant at the senior high school was more than 20 years old and needed major repairs and replacements. Careful analysis revealed that replacement of the senior high school boilers with new high pressure boilers large enough to carry both buildings would be the most practical procedure, initially and over the years. Some major building operations and stack repairs were required as well as complete new equipment for conversion from coal to oil firing.

Class areas are equipped with unit ventilators and auxiliary convectors to provide heating and ventilation. Each unit is controlled by a dual thermostat that automatically reduces the heat for the night and increases the heat during the day. Each area may be individually controlled for evening activities.

Interior walls in the academic and homemaking units are plastered; in the auditorium, plastered above a cement plaster wainscot; in other areas, lightweight concrete brick and block. Corridor walls are plastered above the glazed tile wainscot.

Ceilings are acoustical tile; floors are asphalt tile. Woodwork and supply cases in the classrooms are red oak.

The gymnasium has exposed open trusses with precast cement slab roof deck; the clear height to the trusses is 22 feet. The maple floor is placed over a subfloor, sleepers and concrete. The glazed tile wainscot is door height; above it is lightweight concrete brick and block.

PASTEL SYMPHONY

The interior of the entire building is a symphony of harmonious pastel tints. Most class areas are decorated in two colors, with a soft pastel color on the so-called "front" wall of the room and the window wall and a color a bit more stimulating on the other two walls. The floors, furniture and woodwork are all in light colors. Pleasing wallpapers and draperies have been used to create a cheerful interior. Many of the wallpapers are plastic and are washable. Wallpaper, it has been found, can be more easily maintained than can painted walls.

Although the finished building looks expensive, the actual cost, \$1,557,582, or \$11.54 per square foot, tells the true story. The "expensive look" is created by extensive use of glass to give a feeling of openness and by the interesting combinations of finished materials and colors.

Don't overlook the importance of

GROUND REFLECTION IN DAYLIGHTING

J. W. GRIFFITH

O. F. WENZLER

E. W. CONOVER

DAYLIGHT REFLECTED FROM THE ground may contribute a great deal of illumination within a building. In fact, for vertical windows, this reflected daylight may be the major source of daylight. Consequently, the assumption that daylight arrives at a window directly from the sky only is basically in error, and architectural design for daylighting as well as daylighting prediction methods should take into account this reflected light arriving at windows from below the horizontal.

The amount of reflected light depends on the light incident on the ground and the ground reflectance. The light incident on the ground can vary in intensity over a wide range depending on the sky brightness pattern and on the position of the sun. Its upper limiting value is approximately 10,000 foot-candles.¹ Ground reflectance also varies over a fairly wide range, as the reflectances of ground surfaces and ground cover commonly found in the vicinity of buildings may be in a range from 10 per cent to almost 100 per cent, with values in the range from 15 per cent to 50 per cent being commonest. Typical ground reflectances are shown in Table 1.

An indication of the contribution of light from ground reflections is shown by a theoretical computation for several typical conditions in Table 2.

This table is computed on the basis of an overcast sky having an equivalent brightness of 1000 foot-lamberts, which has been employed for many years as the basis of daylight prediction methods.² This sky produces 1000

From a paper presented at the National Technical Conference of the Illuminating Engineering Society, Chicago, September 1952. Mr. Griffith is research associate at Southern Methodist University and Messrs. Wengler and Conover are industrial consultants.

¹Benford, Frank, and Boch, John E.: A Time Analysis of Sunshine, Transactions I.E.S., Vol. 34, p. 200, 1939.

²Recommended Practice of Daylighting, Illuminating Engineering Society, New York, 1950.

TABLE 1—Typical Ground Reflectances

	PER CENT		PER CENT
Grass fields, lawns.....	18-23*	Snow, old	59*
Dead grass	28-32	Wild fields	26*
Meadows in foreground.....	14-18*	Concrete	55†
Meadows near horizon.....	35*	Macadam	18†
Snow, fresh	100*	Gravel	15-35

*After Logan³

†After Kimball⁴

TABLE 2—Illumination Incident on Vertical Windows From Uniformly Overcast Sky Plus Ground Reflections

Per Cent Ground Reflectance (Table 1)	10	20	30	40	50
Incident illumination from:					
Uniform sky only (ft-c).....	500	500	500	500	500
Ground only (ft-c).....	50	100	150	200	250
Total: Sky plus ground (ft-c).....	550	600	650	700	750
Incident illumination from:					
Ground only, % of Total.....	9.1	16.7	23.1	28.6	33.3

foot-candles incident illumination on the horizontal outdoors and 500 foot-candles incident illumination on the vertical window. The illumination incident on a vertical surface from the ground is computed on the basis of the incident horizontal illumination and the ground reflectances shown. It will be noted that the contribution from below the horizontal ranges from 9 per cent to 33 per cent of the total incident light for the overcast sky and range of ground reflectances shown on this table.

Nonuniform overcast skies usually are brighter at the zenith, thus producing more light incident on the horizontal for the same light incident on the vertical than does the uniform

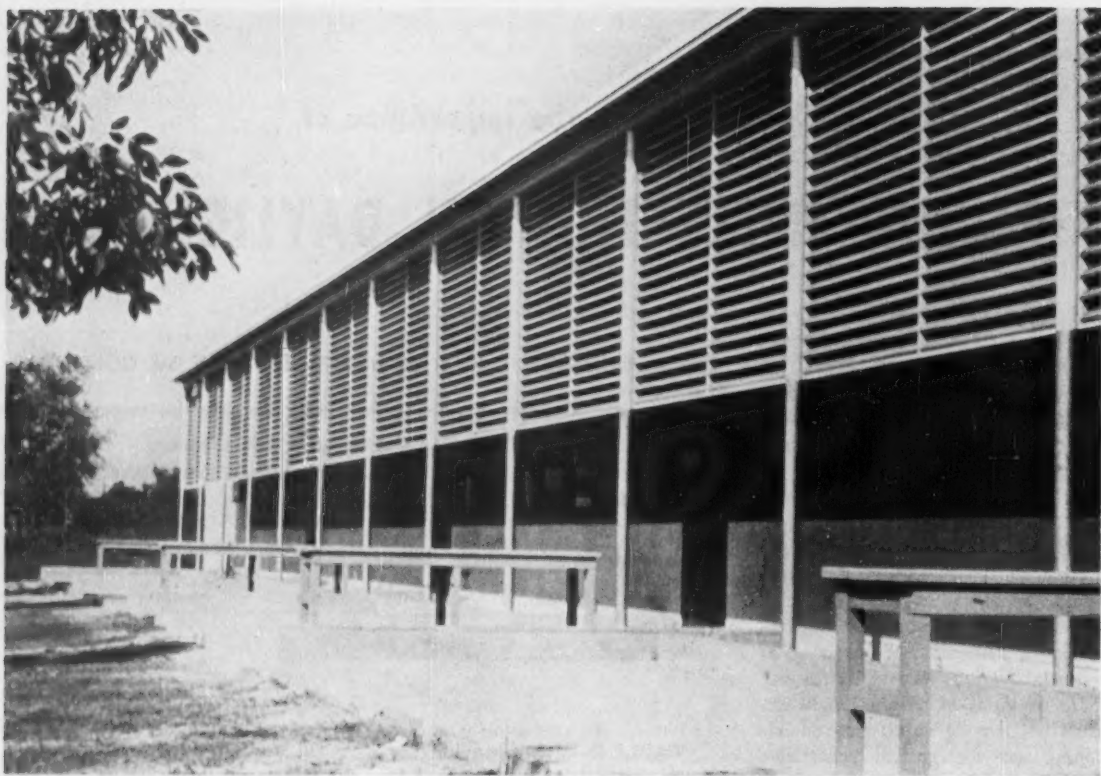
sky. The increase may be of the order of 25 per cent. This makes the percentage of light from the ground roughly 25 per cent greater for the nonuniform overcast sky than for the uniformly overcast sky used in the computations in Table 2.

The contribution from the ground may be considerably higher yet for a clear sky with sunlit ground. In fact, for some conditions of sun and ground, there may be more light entering a window from below than from the sky.

This light reflected from the ground cannot be considered as, in effect, more light from the sky. The light from the ground is, instead, indirect light in a room. It reaches the work plane by interreflectance from the upper walls and ceilings. It may at times produce more light proportionately on the work surfaces farthest from the window than does direct sky light alone. It improves the uniformity of the il-

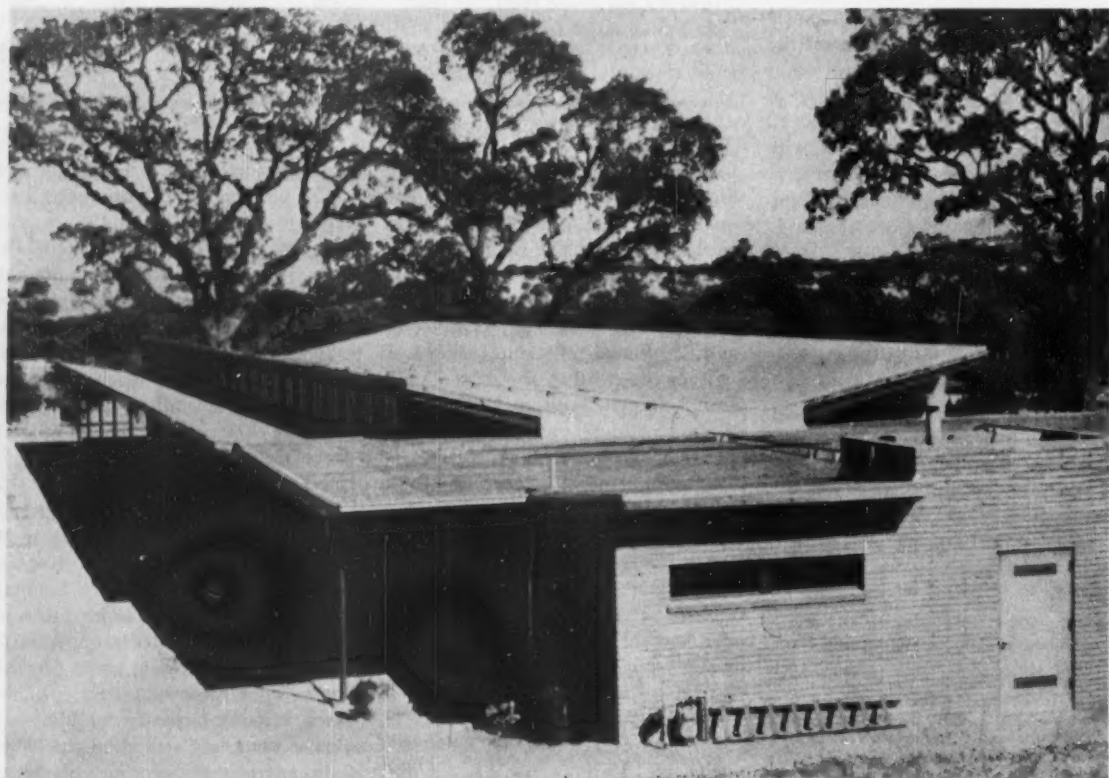
³Logan, H. L.: Specification Points of Brightness, Transactions I.E.S., 34:881 (September) 1939.

⁴Kimball, H. H.: The Determination of Daylight Intensity at a Window Opening, Transactions I.E.S., 19:217 (March) 1924.



Above: Here bonus light comes from concrete. Outside horizontal louvers shield skylight and sunlight but allow the light reflected from the concrete to pass

into the classroom. Below: Under clerestory window is a reflecting roof. An overhang shields sunlight and skylight but allows ground light to be reflected inside.

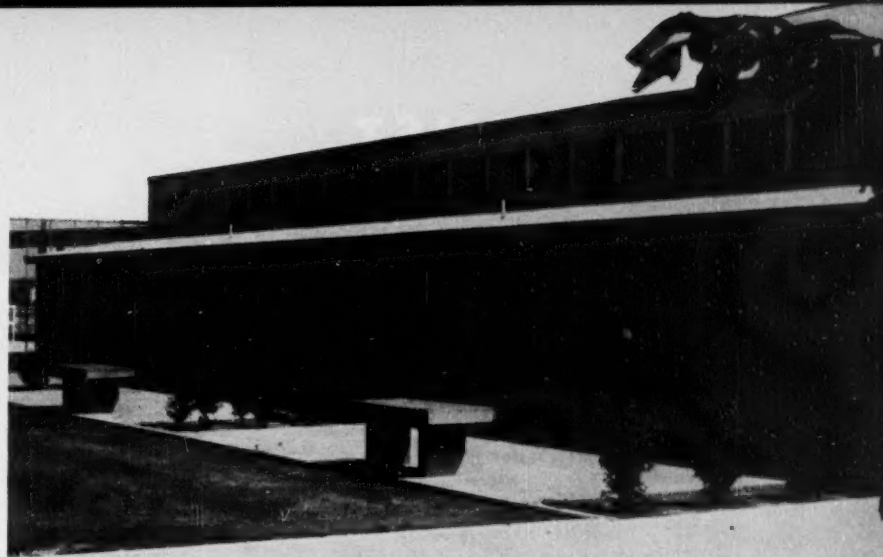


lumination in the room and it improves the brightness ratios.

Just how effectively ground light is actually utilized in a room can best be shown by a study of ground light alone. Table 3 shows the maximum, average and minimum readings of illumination on the work plane of a typical room with light coming from the ground only. These readings were taken at Southern Methodist University in a one-fourth scale model representing a 30 by 30 by 12 foot room. The sky was black for this series of tests, and all of the incident light was from the ground. The fenestration was clear glass extending from wall to wall and from a 36 inch sill to the ceiling, and corrections have been introduced to allow for a 20 per cent reduction representing the effect of the mullions and muntin bars typical of metal window construction. Data are shown for 30 per cent reflectance on the floors, 50 and 70 per cent reflectance on the walls, 70 and 85 per cent reflectance on the ceilings. Readings were taken at stations representing 5 foot intervals throughout the room at 30 inches from the floor.

Values computed from actual test results are shown for 100, 150 and 250 foot-candles incident on the window from the ground alone. These represent the ground light which would be received for typical ground reflectances of 20 per cent, 30 per cent, and 50 per cent, respectively, representative of grass, gravel and concrete, if these grounds were illuminated by the 1000 foot-lambert uniformly overcast sky. They also represent the light which would be received for average ground brightnesses of 200, 300 and 500 foot-lamberts, respectively. Light received from the ground for other conditions would be proportional to the average ground brightness.

From the data shown in Tables 2 and 3 it appears advisable for comparison of daylighting installations or for



Use of an outside classroom as a reflector. A reflecting roof under a clerestory window increases the efficiency of the clerestory window.

daylighting prediction to evaluate the reflected light from below the horizon and add it to that received directly from the sky. It has been common practice to use a reading of the total light incident on a vertical fenestration as a basis for comparison of daylighting tests results. Such a procedure, however, does more than just neglect the added light available from the ground. It actually penalizes the installations with higher ground reflections for their more effective use of light.

For example, consider two identical rooms, each lighted by a uniformly overcast sky of 1000 foot-lamberts brightness, one having zero ground reflectance outside the window, the other having 30 per cent ground reflectance. The room with 30 per cent ground reflectance would obviously have more light on the work plane. Each window would receive 500 foot-candles directly from the sky, but the one with 30 per cent ground reflectance would receive an additional 150 foot-candles by reflection from the ground for a total of 650 foot-candles incident on the window. Since this light from the ground must be reflected from the ceiling or upper walls before being distributed to

the work plane, it produces less light quantitatively on the work plane than does an equal amount of sky light. Consequently, if the readings for the latter room were adjusted to a base of 500 foot-candles incident instead of 650, the adjusted illumination values for this room would be lower than those for the room with zero ground reflectance.

In making this type of comparison, therefore, the utilization of light for the room with ground reflections has been penalized by only a fraction of its interior illumination's being considered, while all of the illumination for the room having no light from the ground has been considered. A fairer comparison could be made by using an overcast sky having an equivalent brightness of 1000 foot-lamberts as a basis rather than adjusting to 500 foot-candles incident on the window.

The utilization of ground light is not a new phenomenon. It has been used for years, but many installations have been penalized by lack of its consideration. Horizontal louvers such as venetian blinds, for example, can be adjusted to shield the eye from high sky brightness when objectionable and still allow reflected light from below to pass through for indirect daylighting. Strategic location of concrete parking areas, sidewalks and light colored playground areas can be incorporated effectively into many designs. Roofs under clerestory and similar windows can be treated as reflectors to increase the amount of light reflected into the windows from below.

Light from below the horizon is a dividend from something whose only cost is good design practice.

TABLE 3—Interior Illumination From Ground Light Only

VERTICAL ILLUMINATION	Work Plane Illumination									
	100 FOOT-CANDLES			150 FOOT-CANDLES			250 FOOT-CANDLES			
	Reflection Factors*	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.
	30-30-85	16.4	9.6	4.4	24.6	14.4	6.6	41.0	24.0	11.0
	30-70-85	17.4	10.8	5.8	26.1	16.2	8.7	43.5	27.0	14.5
	30-50-70	16.2	9.0	4.2	24.3	13.5	6.3	40.5	22.5	10.5
	30-70-80	18.0	10.4	5.6	27.0	15.6	8.4	45.0	26.0	14.0

*Of floor, walls and ceiling, in that order.

*Of floor, walls and ceiling, in that order.

CHALK DUST



Frederic M. Harris

THAT WORRY BUSINESS

(adapted)

There are really only two things to worry about: Either you are a school administrator or you earn a living wage.

If you earn a living wage, there is nothing to worry about.

If you are a school administrator, there are two things to worry about:

Either you get fired or you die on the job.

If you get fired, you don't have to worry any more.

If you die on the job, there are only two things to worry about:

Either you go to Heaven or to some less popular place.

If you go to Heaven, there is nothing to worry about.

But, after a lifetime as a school administrator, you will feel perfectly at home in the other place.

So, why worry?

REPORT FROM SUGARTOWN TID-BITS

SUGARTOWN, MAY 1.—The school board met last night to clean up the business of the year. The session lasted until midnight and was attended by all members of the board except Jake Miller and Doc Johnson. Doc was out assisting the stork, and Jake says he has retired from public life since the last election. He says that it's a thankless job trying to please everybody and the League of Women Voters besides.

Before the meeting it was rumored that there was agitation to change models for next year, including the school bus and the superintendent. This sort of talk is usually prevalent at this season, but in your editor's opinion, there is nothing that a little overhaul and a new piston job won't take care of. Both prof and the bus have given good service; we might do even worse.

The board read a communication from some New York City organization which suggested that Sugartown should look into the matter of unpatriotic shenanigans in textbooks. Two or three members got quite excited until prof pointed out that the last set of textbooks was purchased before the war and he would welcome new ones all around. The board voted to file the letter.

In recognition of the close of the school year it was decided to pay all outstanding bills, the local ones, anyway. When prof reported that this would put a severe strain on the budget, he was appointed a committee of one on Ways and Means.

The P.T.A. was thanked for the fine new picture of

Washington Crossing the Delaware, which was presented when the president cleaned house last week. The picture will be used to cover the crack in the auditorium which was caused by the recent thaw.

The meeting ended at Dick's Dining Car—on a most harmonious note.

IS YOUR SHOW SLIPPING?

BEFORE WE KNOW IT, that hoary, stylized ceremony known as Commencement will be breathing down our necks, and, brother, you better do better than you did last year or else you may have to begin to commence somewhere else. Last year the two and a half hours of the ulcerative proceedings were so dull that even your best friends wouldn't tell you.

Thousands of scholarly words have been written in an attempt to pep up Commencement, in vain. Everything from bathing beauty contests to warmed-over spring pageants has been advocated. But still the same old show goes on. The ceremonies start late, babies bawl, the orchestra leader falls into the tuba, the glee club contracts measles and sore throats, and the public address system gets delirium tremens!

The Commencement pattern unfolds drearily as the list of prizes lengthens and \$500 worth of captive audience time is taken to distribute \$5 worth of awards. Even at that, the Commencement is no giveaway show, nor does the main speaker even answer the \$64 question. Fortunately, he is usually raucous enough to overcome the snores of despondent sitters and the howls of infants who are indignant and confused by the cruel and unusual punishment.

Yet every school administrator, through exposure to college presidents and Shakespeare, is something of a thespian, or else he wouldn't be head of the greatest production in the community. The mystery is, why doesn't he use his natural talents for a display worthy of his product? Why is his show slipping?

Commencement, my masters, is a time for celebration and rejoicing. We are told that the public relations value thereof has a high correlation, plus or minus. We are given to understand that it is excellent advertising without singing commercials. Let us, then, highly resolve to start on time, to continue no longer than one hour and a quarter (including time consumed in the late start), and to keep things sprightly, interesting and fast moving. Let us provide baby sitters for the oncoming generation and let us carry a burp gun in the event the Commencement speaker orates more than 20 minutes.

It is inconceivable that any jury would convict for homicide if the gun is properly used!

CAN CITIZENS REALLY HELP

in solving educational problems?

MR. CHAIRMAN, I move that we make a film of the schools in Duplin County." Thus, after a year of preliminary work, a layman recommended the first step toward the solution of one of the county's most pressing educational problems. His is one of seven rural North Carolina counties that are trying to harness public interest in education to improve the schools. Laymen, school board members, the professional staff, and the school of education of the University of North Carolina have been working together, and the first results of their labors presage increasing success.

Duplin County was selected as a pilot county for North Carolina's part of the Southern States Cooperative Program in Educational Administration financed in part by the W. K. Kellogg Foundation. It is a distinctly rural county with a population of less than fifty thousand and no town of more than two thousand. Its principal industries are truck farming, lumbering and pickle manufacturing; its crops are tobacco, corn and potatoes. Its communities are scattered, and there is relatively little communication between them. Three weekly newspapers serve to disseminate the local news.

TYPICAL COUNTY

Duplin is typical of the North Carolina county unit system of organization. It has a county board of education and separate school committees for each attendance area. As in most counties, the duties of the school committees have never been clearly defined, although they include some responsibility in the selection of principals and teachers. Few means for helping the people in one section of the county to understand the problems of those in another had been discovered. The county board of education, a three-member body, had to shoulder the whole responsibility for making an equitable distribution of

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school funds, building new additions at one school and not at another, and the maintenance of good public relations.

In November 1951, at the invitation of the Duplin County superintendent of schools, the members of the county board of education and district school committees met with the superintendent, his staff, and the school principals to consider whether to form an organization to work on their mutual problem—the improvement of education. At this meeting, after an inspirational talk on the duties and responsibilities of school board membership by a representative of the university's school of education, the group organized itself into the Duplin County School Improvement Committee and invited the presidents of all of the local parent-teacher associations to join. The committee agreed to have a monthly dinner meeting in one of the school lunchrooms.

Because of the size of the group, about eighty-five persons, it was apparent that there should be an executive committee to do preliminary planning for the meetings. The board of education appointed as the steering committee a 20 member group made up of the members of the board of education, the superintendent of schools, the county auditor, two prin-

cipals, two housewives, three businessmen, one civil engineer, the editor of a local paper, three farmers, a theater owner, and a tobacco auctioneer.

Selection of the members of the executive committee was made on the basis of their interest in public schools. Some consideration was given to the individual's ability to work with the group. No effort was made, however, to confine the membership to those who were entirely pleased with the present school program. Critics were invited to become members. Each person named to the executive committee was also a member of other county-wide organizations, such as the Grange, the Farm Bureau, various civic clubs, women's clubs, the chamber of commerce, community clubs, home demonstration clubs, and fraternal organizations. Eight of the 10 school committees were represented on the executive committee.

PROBLEMS ASCERTAINED

As soon as the executive committee was appointed and had elected its officers, it set itself the task of ascertaining the educational problems of the county. Each district school committee was asked to meet with its school principal and list the problems with which it was faced. The county board of education and the superintendent were asked to do the same. These lists of problems were forwarded to the university for classification and study and were then considered by the executive committee. The problems fell into four general classifications: (1) administration; (2) instruction; (3) public relations, and (4) organization (particularly county board-district committee relationships). The executive committee decided to attack, first,

This is the first of several articles dealing with the practical applications of research in the field of educational administration as developed by the C.P.E.A. in the southern states.



Left: Lay advisory groups for county schools must be countywide in representation. Here the executive committee checks a map to make sure all sections of the area are represented on the working committees.

the area of public relations and, second, the delineation of the responsibilities of the county board and district committees.

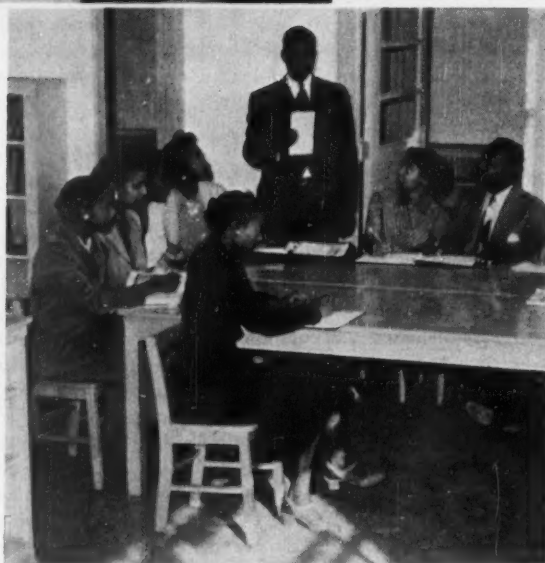
The five meetings of the school improvement committee held during the first year of the project were either exploratory or for orientation. Approximately sixty members were usually present. They were urged to sit at dinner with people from districts other than their own so that they might become better acquainted. After eating, the group either heard a presentation of some phase of school board work or broke into smaller discussion groups dealing with educational problems. Laymen served as chairmen of the small groups and principals as recorders. Report cards, promotion policies, the curriculum, building needs, and the duties of school committees all came up for attention.

INTEREST AROUSED

By the end of the school year 1951-52, a great deal of interest in the activities of the school improvement committee had been aroused throughout the county. The newspapers gave wide coverage to the meetings, the county board of commissioners indicated interest and gave support, and the committee recessed for the summer feeling that its work had been successful.

At the beginning of the second year the executive committee decided that it was necessary to focus more atten-

Faculty members fill out an opinionnaire on the educational problems of the county. Lay citizens are given a similar questionnaire; then the results are compared.



tion on the problem of improving public relations. The large size of the county and the difficulty of communication between the various segments of the population still seemed important hurdles. It was difficult to show the people in one locality that their needs were being met fairly in relation to what was being done for schools in other localities. It had become apparent that many people at one end of the county were not at all familiar with the schools and communities at the other end of the county.

The local theater owner offered to film some of the schools and school activities for the cost of materials only.

At the same time consultants from the university agreed to help with the project by making 2 by 2 inch colored slides of buildings, equipment, buses and school activities to portray county educational problems and needs. Work on the film is going quite rapidly at the time of this writing. A recorded lecture to accompany the slides is complete. The script was dictated by the chairman of the board, and the lay members of the executive committee are presenting the slides and lecture throughout the county to various club groups. Thus laymen are becoming the champions of the public school cause, and interest in public education is growing rapidly.



A rural school principal discusses transportation problems with two lay citizens who each day face similar problems in their businesses.

The second project planned by the executive committee for the school improvement committee is the definition of the responsibilities of the local district committees and the preparation of a handbook for new board and committee members.

SAME PATTERN FOLLOWED

The other six counties in the North Carolina project for school improvement and leadership development have followed essentially the same pattern. Since they have been operating less than a year, progress there is less readily apparent than it is in Duplin County. In each county the superintendent and board of education have determined the way in which laymen were to be included in the program. In several of the counties central advisory committees made up of school people and interested citizens have assumed the primary responsibility. In others, exploratory surveys of specific instructional or administrative problems have been made by university staff members with local staff members before the involvement of lay citizens was undertaken.

In all cases the pattern adopted has been approved by both the superintendent and the board of education, and care has been taken to keep the legal responsibility of the board and the professional school staff clear. While the school of education invited

participation in the program, only those superintendents and boards of education that could see the value in close association with lay groups were encouraged to take part in the project.

The project staff of the university has assumed responsibility for recording and interpreting as nearly as possible what changes take place in each of the project counties. This process of evaluation includes the use of three types of information. The first is the information available in the comprehensive reports made by the principals and county superintendents. This will include such measures of school success as attendance, holding power, course offerings, and ability to raise money for school purposes. The second source of information will be ratings by state supervisors at the beginning and end of the project as to the quality of school programs and the effectiveness of school personnel. The third source of information will be the data collected about the people actively involved in working with the project. This will include the administration of a questionnaire designed to determine changes in public opinion with regard to current school problems and issues.

The public school opinion questionnaire used in the project has been developed by members of the school of education staff and consists of 50 multiple choice items dealing with

such problems of general importance as the relationship between the state and local governments with regard to the support of education, the responsibilities of school board members, policies for employing teachers, federal aid to education, race relations, sex education, and school consolidation. It will be used both to determine changing attitudes and opinions of individuals taking part in the program and to compare the present attitudes of groups of individuals. It is of importance to know, for instance, whether there are important differences of opinion between the citizens of the community and the professional school staff. The opinion of 135 outstanding people in the field of education was obtained so that a consensus of experts has been established which may be used as a basis for determining the "professionalness" of groups working with the project.

The work of the seven project counties is coordinated by frequent meetings of the project staff and by periodic conferences of representatives of each county in a central place. The first phase of these conferences was carried out by superintendents who discussed the nature of the project and technics for involving laymen. The second phase consisted of a leadership conference to which the lay chairmen of advisory groups and superintendents were invited. At this meeting projects for community improvement were discussed with visitors from four states who described community projects which had been successful in their states. The third phase will include workshops on local problems for principals and district committeemen.

AIMS OF PROJECT

The use of laymen in the improvement of public education is not new. Various patterns, including the work of parent-teacher associations, community councils, and citizens committees, have been quite well accepted in many communities. The use of county-wide groups to consider the problems of the schools has been tried less frequently. It is the hope of those working with the cooperative project in school improvement and leadership development that they may describe some of the processes for harnessing the power of informed public opinion in the improvement of schools and thus in the development of more democratic leadership, lay as well as professional.

CONSOLIDATION'S EFFECT UPON BONDS

LEE O. GARBER

Associate Professor of Education
University of Pennsylvania

ALL over the nation the movement for reorganization seems to be in full swing. With it has come a host of legal problems. It appears that almost a third of the cases involving public schools that come before the courts today have their origins in matters of consolidation or reorganization of school districts. Such will undoubtedly be the situation for some time to come, until the courts have ruled on a sufficient number of these cases to have established precedents that will act as guides for future action.

Recently the supreme court of Louisiana was faced with and handed down a ruling on an important question growing out of reorganization. The question involved the right of a school board of a consolidated district to issue bonds voted by one of the districts before it became a part of the consolidated district.*

BONDS AUTHORIZED

The Rapides Parish School Board had created Alexandria School District No. 1 and Moreland-Welchton School District No. 59. Subsequently it consolidated these two districts and formed Alexandria Consolidated School District No. 1 as the result of an election held on May 1, 1951. In November, 1949, prior to the consolidation, Alexandria School District No. 1 had voted the approval of a bond issue in the amount of \$1,800,000. Of this amount it had sold \$1,300,000 worth of bonds, dated April 15, 1950, which were payable in 20 years. At the time of consolidation the district had authorized the issuance of \$500,000 more in bonds than it had issued.

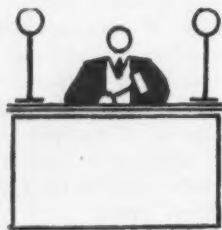
In addition to authorizing consolidation (May 1, 1951) the voters approved the proposition that the newly

consolidated district would assume the bonded indebtedness of the two districts being consolidated. On Oct. 3, 1951, after the newly created district had been properly organized, the board adopted a resolution providing for the issuance of the \$500,000 worth of bonds voted by Alexandria School District No. 1 prior to the consolidation which had not been issued. It stipulated that they were to be issued so as to start maturing one year after Dec. 15, 1951, and were to mature yearly thereafter for a period of 20 years.

ISSUANCE OPPOSED

This action was then instituted to enjoin the sale of these bonds, which had been set for Nov. 7, 1951. It was contended that these bonds had been advertised as being secured by taxes assessed against all the property of the consolidated district. Their issuance was opposed on two grounds.

First, it was contended that at the time the sale of the bonds was approved it was contemplated that all the bonds would be sold simultaneously as a single series to mature within 20 years of the date when the first ones were sold, April 15, 1950, and that to issue \$500,000 of bonds at



the time provided by the later resolution would cause the bonds to mature over a period of time in excess

of the 20 year period which had been authorized.

Second, it was contended that the sale of the bonds authorized by one of the districts only could not create an indebtedness that could be classified as part of the outstanding indebtedness which had been assumed by the newly consolidated district.

With reference to the first contention—that all bonds should have been sold simultaneously—the court refused to accept it. It pointed out that a study of the bond election proposal failed to reveal any language that might lead to the conclusion that it was intended to restrict the sale to a single issue. Instead, the court held that it was obvious that the bonds were to be issued and sold in conformity to the law and that the law clearly sanctions the sale of bonds previously authorized but not sold under certain conditions, concerning which it said:

"Such sales are generally permissible within certain bounds—provided the improvement contemplated is to be a continuous undertaking within a reasonable time, or that the purposes for which the bonds were voted continue to be necessary, or that conditions have not so changed that it would be inequitable to allow the bonds to be issued. . . . Even specific provisions as to maturity have been held in effect to be directory and not mandatory."

As far as the second contention—that the indebtedness incurred as a result of the sale of the bonds could not be considered as a part of the outstanding indebtedness assumed by the newly consolidated district—was concerned, the court accepted it.

TIME ELEMENT INVOLVED

The answer to this contention hinged on the question of whether indebtedness occurs at the time of a vote approving the issuance of bonds or whether it occurs at the time they are issued and sold. The court, in holding the latter to be the case, pointed out that "the authorization of a bond issue does not create an obligation until the bonds are issued and outstanding."

As a result of the election of May 1, 1951, it was voted that the new district—the consolidated one—would assume the outstanding indebtedness of the two districts to be consolidated. "Clearly . . . the \$500,000 of bonds authorized on Nov. 29, 1949, by Alexandria School District No. 1 but not

*Shadow v. Rapides Parish School Board, 56 So. (2d) 555 (La.).

issued are not an outstanding bonded indebtedness assumed and are not an obligation of the new district." Consequently, the court held that the defendant district might not issue the bonds "pursuant to its advertisement on Oct. 15, 1951." This was the advertisement that stated they were secured by taxes assessed against all the property of the consolidated district.

The question remains, of course, as to whether the board might readvertise the bonds for sale with the stipulation that they were secured by taxes assessed against the property of the original Alexandria School District No. 1. While this question was not up for consideration, the answer would appear to be obvious. It would seem that such action would be illegal because at the time of issuance and sale there was no Alexandria School District No. 1. It had ceased to exist as a legal entity following its consolidation with Moreland-Welchton School District No. 59 after the election of May 1, 1951.

As a result of this decision the court appears to have clarified several questions which, while they grew out of and had their origins in consolidation, have applications as well to other than newly organized or consolidated districts.

First, all bonds voted at one time need not be issued simultaneously if they are issued within a reasonable time and if the proceeds are to be used for the purpose mentioned in the bond notification, provided, of course, that conditions have not so changed since the time they were voted as to make their issuance inequitable.

Second, bonds do not constitute an obligation of the district at the time they are voted but at the time they are issued. Consequently, an agreement of a district to assume the obligations of another does not include, unless specifically so stated, an obligation to assume indebtedness to be incurred at some time in the future.

Right: Charles Ross, managing editor of the Newark Courier, Newark, N.Y., gives some editing advice to Thomas Gibbons, Marion senior, who is getting work experience in journalism.

A small community plans for

WORK EXPERIENCE

MARJORIE L. JANSEN

Business Teacher, Central School
Marion, N.Y.

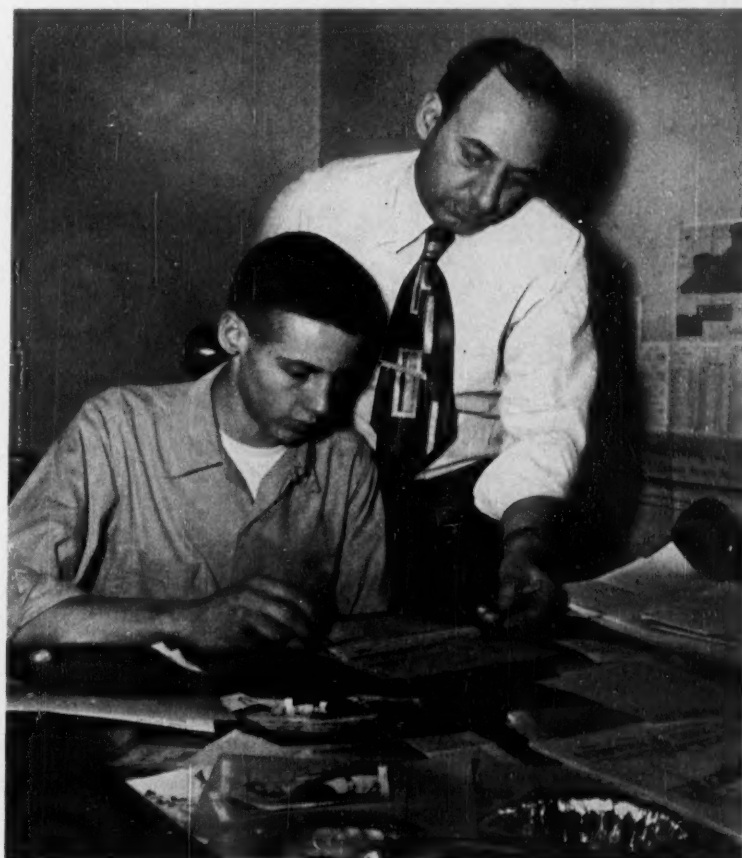
SENIORS at Marion High School in New York State do not go to school on Fridays, except to report at 8 a.m. for the attendance record. Then they go to shops and stores and factories to learn "on the job."

This is the third year for the work experience program at Marion High School. It all started when a committee of three Rotarians and three faculty members was formed to consider the advisability of starting a work experience program.

Marion (pop. 2200) is a small agricultural-industrial community located

in the central-western part of Wayne County in New York State. It is 12 miles south of Lake Ontario and 23 miles east of Rochester.

Industries and businesses within the community include a fruit canning company, two lumber companies, a fertilizer plant, a packing house for vegetables, a vinegar plant, a ladder factory, a cold storage plant, restaurants, a bank, gas stations, garages and the usual grocery, dry goods, and drug stores. While these businesses employ some Marion people, the great majority of residents work in the sur-





For her work experience, Janice Wisse does office work for Sanford Bush, who is vice president of the First National Bank at Marion.

rounding communities of Palmyra, Newark, Fairport, East Rochester, and Rochester.

Almost as many women as men are employed. Many of them work in the local canning factory, while many other workers commute to Palmyra and Newark.

In the fall of 1950 a survey was made by mail inviting the businessmen to participate, if they desired, in setting up a work curriculum for seniors. As a result, 18 of the 24 seniors were placed in various jobs, in a law office, factory offices, retail stores, a bank, and garages, and in apprentice situations in plumbing and carpentry. The business teacher acted as coordinator of the program.

In the year 1951-52 we followed the recommendation of the employers and seniors of the preceding year by scheduling the work experience program each Monday of the third quarter of the year. All 33 seniors, 100 per cent of the class, were placed on jobs, and they spent all day Monday at their work with the employer. They reported to the school at 8 a.m. for attendance record purposes, then went to their respective jobs from 8:15 a.m. to 3 p.m. They quit work at 3 o'clock because the majority of the students had to take the school bus home. Sixteen students were employed in office work, four in mechanics, three in carpentry, six in retail sales work, two in plumbing and repair, one in labeling, and one in food preparation.

This year the 35 seniors worked in

area businesses every Friday from January 30 to April 17. Thirteen students worked in offices, six in stores, nine as mechanics, four in a hospital, one in a cabinetmaking shop, and one on a newspaper; one student observed and helped in the art departments of the Marion and other area schools.

Every effort is made to match the job and the individual. A student is assigned to jobs after a study of his record and in accordance with his field of interest.

PURPOSES OF PROGRAM

The following objectives were listed at the start of this program and have been considered throughout its course:

1. To prepare youngsters for life and to take their places as good citizens in the community.
2. To provide a realistic understanding of and respect for work.
3. To aid young people in adjusting to jobs through acquiring skills and habits and through determining their aptitudes and limitations.
4. To develop in students habits useful when employed, such as punctuality, regularity, ability to work with others, and willingness to take orders.
5. To provide opportunities for vocational exploration and leads to full-time employment.
6. To help students gain self-reliance and self-confidence.
7. To acquaint students with community employment activities and projects.

The type of work experience was largely exploratory in nature. It had as

its central objective job orientation and the development of guidance values, attitudes, and work habits applicable in several occupations. The program was used to supplement general education. Throughout this work program an attempt was made in school to relate the students' school training to their business training in the community. Periodic reports were given by the participating students, and help was given whenever the need arose.

As a result of the work experience, the student matures and develops more wholesome attitudes toward work. He becomes more eager to learn in school and out, shows increased interest in such basic things as the ability to read, the ability to follow directions, the ability to express himself clearly, and the ability to calculate. He recognizes more readily the value of school learning situations and appreciates more the worth of being well trained in the art of getting along with people. Something important happens to a student who spends part of his school time at work for a real employer outside the classroom walls. He begins to think more and more like an adult.

While administrators, faculty and businessmen are enthusiastic about the program at Marion Central, the proof of its value comes from students who have actually participated in it. A few of the comments on the value of the plan are as follows:

"This program provided the experience of on-the-job situations. If you read books, it's all right, but some problems might arise which cannot be realized from books. Practical experience amounts to more and makes the work learned in books more real."

"You get to know people and learn how to meet the public. You find that in every job there is something you like and something you don't like. You learn to be helpful and polite. You learn to work with others. You learn to make decisions of your own and to stick to them."

"This program was very worth while to me. It helped me to see how an office is actually run, and how important courtesy and the ability to listen to instructions are. The experience of working together with other office help also helped me."

Such a program has been in effect in many of our large cities for several years, but it can be done in a small community as well!



CADET TEACHING

*—a step toward solving
the teacher shortage*

FLORENCE C. GUILD

Coordinator of Secondary Education
Indianapolis Public Schools

Cadet examines
child's reading
record while the
child discusses
book which she
has been reading.

IT IS no secret that school systems of the nation are concerned with the problem of an increasing teacher shortage. To help to solve their own problem of teacher recruitment, the Indianapolis public schools began in the spring of 1952 a program of cadet teaching. The aims of the program are to interest high school juniors and seniors in the profession of teaching and to give high school students interested in becoming teachers pre-vocational information and experience. The program, heartily approved and supported by H. L. Shibley, general superintendent of education, and received enthusiastically by students, principals and teachers, promises to become increasingly popular.

High school juniors and seniors with average or better scholarship records may elect the course for one or two semesters, thus earning as many as two credits in social studies. Students enrolled in the course are scheduled for one period daily in a neighboring elementary school, with allowance of time for travel between the elementary school and the high school. In order to shorten the travel time and to allow for any necessary conferences with the elementary

teacher supervising the class work, many students begin or end their day with the class in cadet teaching.

The high school principal arranges with elementary principals of neighboring schools for assignment of cadets to cooperating elementary teachers willing to supervise their work. He also appoints an interested high school teacher to sponsor them. The high school sponsor, then, is responsible for general supervision of the cadets.

DUTIES OF SPONSOR

The high school sponsor not only stimulates the interest of qualified students in the program but also handles any administrative details delegated to him by the high school principal, such as enrollment, scheduling and placing of marks on report cards. The sponsor meets the cadets for general or individual conferences, confers with the cooperating elementary teachers when necessary, and visits the cadets on assignment at the elementary school when possible. He also supervises the professional reading of the cadets, and, as opportunities arise, he gives them general information about the profession of teaching. In addition, he meets with other high school sponsors and

me to evaluate and improve the developing program.

The elementary principal administers and supervises the program in his own school. He discovers teachers willing to serve as cooperating supervising teachers, helps them to understand the purposes of the program and the responsibilities involved, advises them in their work with the cadets, and sees the cadets at work as often as possible.

The cooperating elementary teacher trains and supervises the cadet in the classroom and evaluates his progress in terms of marks at the regularly scheduled grading periods. Because of the importance of the cooperating teacher to the success of the program, a teacher is urged not to accept the assignment unless he wishes to do so because of his professional interest in the recruitment of future teachers and because of his interest in young people. He accepts a cadet with the realization that the cadet has had no preservice training in teaching and is, in effect, another pupil to teach. The teacher is approved by the elementary principal if he has had three or more years of successful teaching experience and is a happy, well ad-

justed person and is enthusiastic about teaching.

The developing program includes a variety of citywide activities. Among these has been an orientation meeting held at the instruction center on the opening day of the semester with cadets, sponsors, consultants and coordinators. At this meeting a film on good teaching was shown, and a general discussion was held. During the last semester three more group meetings were held at the instruction center, one during each of the six-week marking periods. At these meetings the cadets divided into groups according to the elementary grade levels to which they were assigned. Four consultants then worked with the primary, intermediate and junior high groups. Another activity near the end of the spring semester was an evaluation meeting attended by cadets, sponsors, cooperating teachers, principals and consultants. At this meeting a panel of cadets led by a high school sponsor and a consultant discussed their cadet teaching experiences, and the audience joined in the general discussion.

The course in cadet teaching consists of (1) readiness activities and (2) participation activities. The cadet first observes the work of the cooperating teacher and does not participate until he is ready. His participation is closely supervised. As the cadet gains skill and confidence, the amount of his participation increases, but he is never left alone to plan or manage whole group activities.

MUTUAL BENEFITS OBTAINED

According to a questionnaire sent to the cadets at the close of the 1952 spring term, the cadets helped the teacher and the pupils in a number of ways. These included mixing paint, grading papers, preparing bulletin board materials, helping the substitute during the regular teacher's absence, cutting paper, helping slower pupils, playing the piano, checking attendance, leading songs, preparing for the pupils' arrival, making a circus, building a post office, making charts, telling stories, helping conduct various types of group work, reading aloud to pupils, correcting spelling, conducting morning exercises, making number cards, checking workbooks, listening to book reports, helping with art work, working on blackboard displays, drilling with flash cards, helping with assembly programs, mounting pictures, helping

to plan lessons, making study sheets, helping to give tests, conducting spelling bees, helping to diagnose individual difficulties, leading games, taking groups to the rest room, umpiring baseball games, and helping individual children and small groups.

Among the values received from the course the cadets mentioned these: personal satisfaction in watching and helping children learn and grow; realization that children are willing and eager to learn; greater appreciation of individual differences; pleasure from helping to develop good American citizens; realization that a different approach must be used in each case; discovering that it is fun to help; greater understanding of the teacher's responsibility to mold individuals and character; satisfaction from accomplishing something worth while.

STUDENTS COMMENT

Replies to a question concerning what they might say to their friends about the course included: It will help you to decide whether or not you are interested in teaching. You will learn the joy of teaching. You will become aware of the humorous events and discouraging moments that teachers have. You will gain a clearer picture of teaching. You will learn that teaching is fun, interesting and helpful. You will find that the children "sell" the course. You will find it is challenging. It will help you to appreciate education. It is gratifying to watch children learn and grow. It will help you to understand the teachers' problems. It will provide knowledge usable later in raising a family. It will help you to value children's friendships. It will help you to learn to work with people and to develop character. It will give you a chance to understand younger children and be useful to you in the home and in church or club work. It will help you decide the grade level

at which you would like to teach. It will let you find out if you are suited to teaching and it to you. It is exciting and develops enthusiasm for teaching. Even if you are not planning to teach, it is wonderful training for parenthood or just getting along with people. It will help you to lose self-consciousness before a group and to develop tact. It will reveal the need for planning work ahead. It will help you to develop higher ideals and clearer self-expression.

Voluntary comments from participating sponsors, principals, and teachers included these: Good. Wonderful. Highly satisfactory. Very desirable. The cadets were helpful and seem sold on teaching. Cadets should continue to take an active part in working with children in groups and individually. The program should be continued and expanded. It has been a distinct pleasure to work with the cadets. This is a step forward in preparing and encouraging students to become teachers. Elementary pupils have accepted the cadets very well.

GREAT INTEREST SHOWN BY ALL

Cadets, sponsors, teachers and principals also made many helpful suggestions for improving the program, most of which have been incorporated in developing plans and activities. Such responses as well as enrollment figures indicate that the program is one of great interest to all participating. In the spring of 1952, 44 students enrolled in the course with six high schools and 21 elementary schools cooperating. In the fall of 1952, 41 students enrolled with seven high schools and 23 elementary schools cooperating. High school sponsors report that more than 67 students have expressed an interest in enrolling for the spring term this year. Because of scheduling difficulties, however, it is not likely that this number will be able to participate in the program.

According to the questionnaire, 34 of the 36 students responding indicated that the program had helped them to decide to become teachers. Two said that they had made up their minds to teach even before they had taken the course but that the program had helped them to verify their previous intentions to teach.

From the interest described, it seems reasonable, then, to conclude that cadet teaching may be a helpful step toward solving the problem of teacher recruitment.



Driver education is now a mandatory course in the California schools although behind-the-wheel instruction is optional.

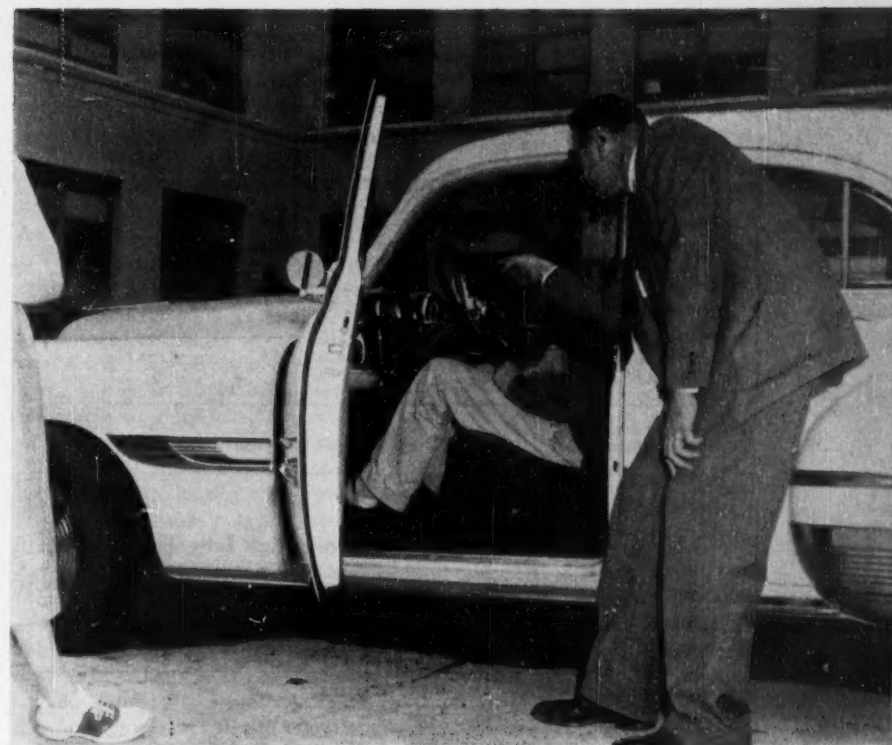
WHAT should be the program of driver education in secondary schools today? This addition to the curriculum has been accepted by more and more schools in recent years, and its adoption many times has been hasty and piecemeal. Administrators who recognize driver education as a part of the curriculum which is here to stay are becoming concerned about such questions as size of class, qualifications of driver education teachers, scheduling and the grade level at which such courses should be offered.

The teaching of proper driving habits, attitudes and skills cannot be taken lightly. The programs must be planned carefully and subject to continuous appraisal. The experience of school systems in California should be of interest, then, to school administrators nationally. All California schools have met the legislative mandate that driver education must be offered in all public high schools in that state, although less than half give behind-the-wheel instruction.

The California law states that driver education shall be required of all students in the secondary schools before completion of the 12th grade; it does not, however, specify a minimum number of hours of instruction. The law further states that only the classroom instruction shall be mandatory and that behind-the-wheel instruction is optional.

The California law of 1949 was an outgrowth of legislation passed in 1947 relative to driver education. The earlier law provided that, in the event driver education was offered in a secondary school, attendance was required of all students enrolled in the secondary schools of a particular district. Difficulties in programming and scheduling were inevitable, and, as a consequence, many schools offering the subject on a limited basis chose to drop the subject entirely. Hence the law tended to defeat the purpose for which it was originally passed. The law of 1947 was repealed, and the existing law of 1949 was enacted.

Many educators contend that the most desirable educational programs evolve from voluntary recognition of need on the part of the alert adminis-



DRIVER EDUCATION

Is Here To Stay

JOHN S. URLAUB

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Berkeley High School, Berkeley, Calif.

trators rather than from directives of some higher authority. This article presents a status report of the driver education program in California, based on research conducted in 1952 at the University of California, Berkeley, under the direction of Prof. Edgar L. Morphet; to some degree it evaluates the existing program in terms of recognized desirable standards.

To obtain the information required a questionnaire was sent to the principals of approximately half the public high schools of California. The schools selected constituted a representative

sampling; for tabulation purposes they were placed in one of five groups according to their average daily attendance. They ranged in size from Group I, schools with 1500 or more in average daily attendance, to Group V, schools with less than 100 A.D.A.

For purposes of evaluating the California driver education program, a list of specific criteria was formulated. The criteria were submitted for approval to a group of recognized national authorities, and the revised statements were used for evaluation purposes. By a comparison of existing

Table 1—Desirable Grade Placement of Driver Education According to California High School Principals

DESIRABLE PLACEMENT	SCHOOL SYSTEMS ACCORDING TO A.D.A.					TOTAL ALL GROUPS
	1801	801-1500	301-800	101-300	-100	
Ninth grade						
Per cent of schools....	9	17	21	32	28	23
Tenth grade						
Per cent of schools....	77	66	63	50	72	63
Eleventh grade						
Per cent of schools....	14	10	10	14	0	10
Twelfth grade						
Per cent of schools....	0	7	6	4	0	4
Number of schools in each group.....	22	29	48	50	18	167

Table 2—Reasons Given by California High School Principals for Not Offering Behind-the-Wheel Instruction

REASONS GIVEN	SCHOOL SYSTEMS ACCORDING TO A.D.A.					TOTAL ALL GROUPS
	1801	801-1500	301-800	101-300	-100	
Cost of operating program						
Per cent of schools....	27	43	52	40	55	44
Unable to obtain automobiles						
Per cent of schools....	4	3	4	22	55	15
Lack of trained teachers						
Per cent of schools....	4	18	19	18	6	15
Difficulty in programming						
Per cent of schools....	18	25	22	24	11	22
Number of schools in each group.....	22	29	48	50	18	167

methods in the California schools with suggested desirable standards, an appraisal of the driver education program was possible.

The following are some of the findings of the study:

1. Approximately 50 per cent of the secondary schools of California were offering a course in driver education prior to the mandatory law of 1949. The course was being offered, however, in only 22 per cent of the schools in Group I. Approximately half the schools studied introduced driver education about the year 1946-47, perhaps in anticipation of the 1947 law.

2. The national authorities chosen to evaluate the criteria were in complete accord that each school should have a qualified member of the staff vested with authority and responsibility to carry out the driver education program. In California the study revealed

that 85 per cent of the schools studied had what they considered such a qualified individual on the staff.

3. Although the majority of the driver education teachers had some special preparation for teaching the subject, 29 of the 167 schools reporting used a teacher with no special preparation in driver education. The "untrained" teacher was found oftenest in the Group V schools and least often in the Group I schools.

4. Forty-six per cent of the schools studied indicated that the driver education teacher was selected because he had a special interest in the subject.

5. The national authorities asked to approve the criteria agreed that driver education should be taught as a separate course rather than by integration or correlation with another related subject already in the curriculum. Only one-third of the schools studied offered separate courses in

driver education. Ninth grade social studies and orientation were the subjects most often combined with driver education. A total of 23 different subjects was used for integration purposes.

6. About 90 per cent of the driver education classes in the selected schools had about the same number of students as similar academic classes had. This was in accord with recognized standards.

7. Approximately 50 per cent of the schools offered six-week courses, and 18 per cent of the schools offered fewer than 10 hours of instruction. The national authorities agreed unanimously that 30 classroom hours should be an absolute minimum, but additional hours of instruction are highly desirable. Thirty classroom hours correspond to a six-week marking period.

8. The authorities agreed unanimously that credit should be allowed toward graduation for work completed in driver education. In California, 14 per cent of the schools studied were not allowing credit for work completed in driver education.

9. The student should be enrolled in the driver education class when he is near the legal driving age, in the opinion of the national authorities. Since the legal driving age in California is 16 years, the class should be scheduled for the ninth or 10th grade. The study revealed that 27 per cent of the schools studied offered the course in the 11th or 12th grade. Although 50 per cent of the schools scheduled the course in the ninth grade, only 23 per cent considered this as the desirable grade placement. Approximately 70 per cent of the selected schools believed that driver education should be offered in the 10th grade.

10. Although guidance and direction should be provided by the superintendent and his administrative assistants, the responsibility for the quality and content of the course must rest ultimately on the teacher, the national authorities agreed. The teacher was regarded as the person responsible for carrying out the program in 93 per cent of the California schools studied.

11. "Facility in programming" was listed most often as the basis of grade selection in scheduling the course, and "maturity of the student" was listed least often as a basis for scheduling.

12. Psychophysical testing devices were used by 78 per cent of the schools selected for this study. The national authorities agreed unanimously that

the teacher should be provided with all necessary instructional aids, including psychophysical tests, in order to facilitate instruction.

13. Motion picture films were used by 97 per cent of all schools studied. Approximately 50 per cent of the schools reported that they show related films on an average of once a week.

14. It was apparent that several agencies were giving valuable assistance to the driver education program. Chief among the agencies was the California Highway Patrol, which furnished speakers in 136 driver education classes. The national authorities were reluctant to approve the practice of having a uniformed officer speak to the driver education classes unless he had received special training for this type of work.

15. There was apparent reluctance among the selected schools not offering a semester course in driver education to offer a semester course in the near future. Approximately 90 per cent of all schools studied believed that driver education should be included in a general safety program. There was general agreement among the national authorities that the program of driver education should be consistent with the basic purpose of general education while achieving the objectives of driver education.

16. Behind-the-wheel instruction was offered in 44 per cent of the schools studied. It was offered, however, three times as frequently in the schools of Group I as in the schools of Group V. There were 14 schools giving compulsory behind-the-wheel instruction to all students.

17. The two principal reasons for not offering behind-the-wheel instruction were given as "cost of operating the program" and "difficulty in programming" by the schools studied. The established practice in scheduling behind-the-wheel instruction is to have one student driver and three student observers; therefore, the pupil-teacher ratio cannot exceed, at any one time, four pupils to one teacher. The pupil-teacher ratio will always remain a dominant factor in determining the cost of behind-the-wheel instruction. Other reasons listed less frequently for not offering behind-the-wheel instruction were "inability to obtain an automobile for instructional purposes" and "lack of a trained teacher." The national authorities agreed that the complete driver education program should include both classroom instruc-

tion and actual behind-the-wheel instruction.

18. In approximately one-third of the schools studied the student had the same teacher for both the classroom and behind-the-wheel instruction. Six of the nine national authorities believed that such an arrangement was desirable.

The California driver education program has taken great strides forward, as evidenced from the foregoing facts. In many instances improvements should and must be made in order to attain standards considered desirable. Safety minded individuals are now preparing for another step forward which appears to be inevitable. A proposed law would require that every public high school provide behind-the-wheel instruction for those students who desire to avail themselves of this instruction.

While this study was made for California, other states may be interested in some of the procedures used and the progress that has been made through a mandatory driver education program. In addition it appears that the following suggestions could ma-

Miniature cars and traffic lights are helpful in demonstrating the dangers and solving the problems of daily traffic on the highways.

terially aid the existing program in the state of California.

RECOMMENDATIONS FOR STATE

1. The state department of education should require basic instruction in general safety education, including driver education and traffic safety, as a requisite for the general secondary credential. The effective date and the number of units required should be determined by the department of credentials and the state department of education.

2. The department of education should encourage colleges and universities to offer courses, carrying regular academic credit, in the areas of general safety education, including driver education. The amount of credit to be allowed should be determined by the institution offering the course.

3. If state funds are made available to local districts as reimbursement for the excess cost of behind-the-wheel instruction, the grants should be made contingent on the school's offering a minimum classroom instructional program in driver education, as has been defined by regulations of the state board of education.

4. Consideration should be given to the establishment of the position of state supervisor of safety education in the state department of education.





Some duties of the supervisor would be to: (a) provide guidance and supervision for the driver education program in the secondary schools; (b) develop a plan for evaluating the total safety education program in the schools; (c) coordinate the activities of all agencies interested in the general safety program, including driver education; (d) serve as an intermediary between the local schools and representatives of the state department of education.

LOCAL RECOMMENDATIONS

1. Administrators should consider the needs of the students first and foremost when scheduling driver education. "Facility or ease in programming" as a method of scheduling the course should not be used until all other possible methods have been exhausted. Similarly, "difficulty in programming" cannot be considered as a legitimate reason for an administrator's not offering behind-the-wheel instruction.

2. The driver education classes should be no larger than the average academic classes. The large lecture hall method is not suitable for this type of class.

3. Administrators should assign as teachers of driver education only those persons who have had adequate preparation in this area.

4. All secondary schools offering driver education integrated or corre-

Above: Visual aids, such as motion pictures, are important in driver education but are not a substitute for behind-the-wheel instruction. Right: Study of automobile motors and their operation also is essential.

lated with another already established course should plan to offer a separate course in driver education as soon as possible. When the course is taught by integration or correlation, it is desirable that the teacher have special preparation in driver education.

5. At least 30 classroom hours should be the minimum recommended standard for classroom instruction in driver education.

6. Driver education should be offered at the 10th grade level, or as near the legal driving age as possible.

7. The classroom phase of driver education should be scheduled during the regular school day and, in all cases, credit should be allowed toward graduation for work completed.

8. There is considerable evidence to indicate that instruction in driver education may be considered a desirable part of the general education program of the secondary school. It is therefore desirable that administrators and teachers continue to evaluate critically the existing program with a view to improving its effectiveness.





A MUSEUM for Every School

A MUSEUM for the schoolyard of every town and village? There is no reason this cannot be, says the New York State Art Teachers Association, which is sponsoring action to start just such a service for the schools of New York State.

The plan's proposers, George Kimak and Barbara Chapin, have long believed that an Artmobile is the most direct and logical answer to a crying need for better distribution of our cultural treasures. Why not mount permanent exhibits in a mobile museum and roll them to the door of school or park? This would make possible professional installation of shows and safe showing of originals; it would mean that a trained attendant could travel with the unit to lecture and to help teachers work out class tie-ins with each exhibit. These are the advantages of a mobile unit over the touring exhibit, which must be unpacked, installed, guarded and then repacked.

The Artmobile has another advantage—it is at home wherever it opens its doors.

"Art appreciation at its finest is a shared experience," says Miss Chapin. "The value of a student's seeing work in a museum is many times enhanced when he sees the work as part of his own community and can talk with friends and neighbors about his reactions. This, too, is how the art audience will grow: One enthusiastic visitor will lead many more to a museum that is in the community, a museum that is theirs to share and evaluate at leisure.

"Art is selling something, something valuable that enriches life as few other purchases can," Miss Chapin continues. "For it the buyer must pay in the coin of time, sensitivity and awareness. Sometimes he must sacrifice a kind of objectivity which is growing too important, especially among the younger people who are deserting a tradition of vocal excitement in favor of a safe reluctance to express feelings.

"Art sells vision. It sponsors creative thinking. It removes blinders from our eyes and offers the joy of absorption in making something grow. It offers

communication between peoples and ages. Why should we hold back, hesitating to offer art in attractive and practical terms?"

Experiments have been made, with good success. The Cleveland Museum of Natural History ran a "trailer museum." It was in the city, where "children have every advantage already." Teachers discovered literally hundreds of children who had never heard of the museum until the trailer visited their school. Now many of these children are regular Saturday class participants.

"PILOT OPERATION"

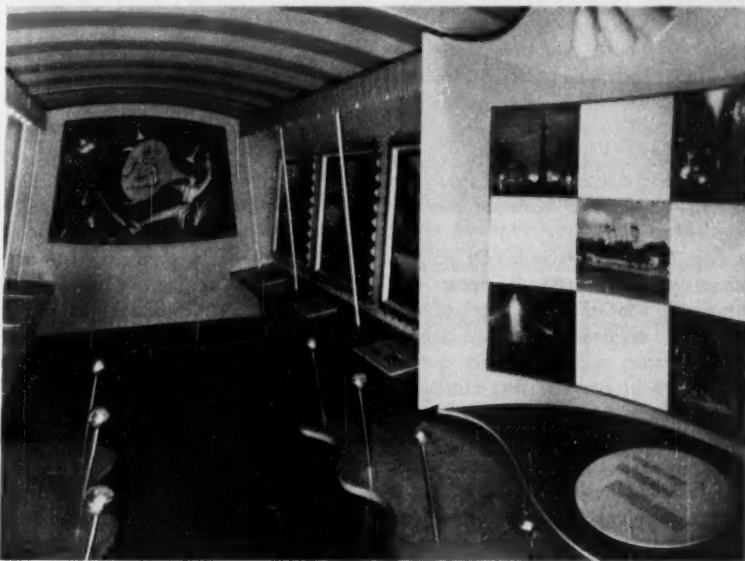
The present plan for a "pilot operation" is specifically for schools in New York State, to be administered under a committee of the Art Teachers Association of that state. Thus exhibits are to be selected by the teachers who will use them. These teachers will also help work out guidance materials and supplementary materials to be used in connection with the exhibits. Helping also will be consultants from museums and professional groups, skilled in locating the proper aids and in recognizing how they can best be used. Thus teachers will find in unit visits the incentive for participation programs,

interclass projects, and term studies, for each exhibit will have been installed with these potential uses in mind, Miss Chapin explained.

George Kimak is an artist, with museum and design training and experience, who was at the Syracuse University Art Gallery and is now art instructor at Baldwinsville Academy and Central School, Baldwinsville, N.Y. There he is experimenting with inter-school programs and school-community relationships through art, with the development of regional art programs and interests, and with ways of increasing creative awareness. Barbara Chapin, a book designer with Scripps College humanities training, is director of Carnival Caravan, a privately sponsored project combining all forms of creative expression in a cultural festival type of program, involving local people both in the planning and in active participation.

Miss Chapin and Mr. Kimak believe that the first unit can establish a pattern of operation for all the groups wishing to supply their state, region or county with its own museum-on-wheels. It is only a question of time, they say, before the Artmobile will be an accepted tool in community life.

This bus, with exhibit, toured Europe advertising the Festival of England.



Great task faces the

TEACHER OF TEACHERS

Book Review by HARRY S. GANDERS

Professor of Education, Syracuse University

THE TEACHER OF TEACHERS—FRONTIERS OF THEORY AND PRACTICE IN TEACHER EDUCATION. By Harold Rugg. New York City: Harper & Brothers, 1952. \$4. Pp. 307.

AS A boy growing up in Fitchburg, Mass., Harold Rugg saw transitions in national and world trade, emerging science and technology adversely affect business of the textile mills, which in better days had brought prosperity to water powered Massachusetts manufacturing towns. High tariffs, favorable to this region, were unable indefinitely to forestall shifts of industry to other sections of the country, with consequent stark and still factories, empty streets, and hungry neighbors.

The apparent inexorable effects of changing national and world events upon individual lives were seen by young Rugg to be not just theories but terrible reality. How Fitchburgers could make a living under new economics was the problem set by industrial and commercial facts. That hope lay in study of actual industrial conditions in all their social and political implications became apparent to this perceiving youth, who was to devote his life to such study and to pleading with fellow engineers, educators, scientists and statesmen to apply creative thought to social reconstruction. And he has wanted it done from the vantage point of the broadest possible scholarship.

Few if any have exceeded Dr. Rugg's effort to amass and interpret, for American education, the facts of our industrial civilization. Hence school administrators will attend his words: "We must invent jobs that cannot be mechanized," for "it is now in the technological cards that all heavy industry will become 'automatic,' that is, relatively operable without men. But a new and revolutionary factor has now been introduced: The displace-

ment this time will be in enormous units and will be permanent. These technologically unemployed will not find work in new industries because the latter will be automatic at their birth."

According to Dr. Rugg, "the electronics men" estimate this will occur in five years if World War III comes and in any case in 25 years. He further says: "During a century and a half, new mechanized industries have arisen each time to absorb those displaced by some major invention." The task which Dr. Rugg assigns in large measure to the schools of America is: "We must invent jobs that cannot be mechanized. . . . Not leisure but labor must become the psychological focus both of life and of education. Our chief cultural goal is not goods, but men—the mind and personality of the craftsman are the true objects of concern. . . . It is clear that new public minds are to be created."

Dr. Rugg singles out the "teacher of teachers" to accomplish this, which he considers to be an essentially educational task. Reminiscent of George Count's "call" to the teachers of America, to build a new social order, is the author's assignment of only partial rôles to engineers, industrial researchers, political scientists, public health officers, and social welfare workers.

TREMENDOUS STIMULATION

The administrator who is more interested in hiring well prepared teachers than in training them will find the chapters on "The Science of Society and Culture: The Social Foundations of Education," "The Science of Behavior," and "Frontiers of Practice in Teacher Education" rather heavy going. But no one can read a Rugg book without receiving tremendous ("crisis") stimulation and contact with many important ideas of social trends.

In this small book the administrator will find presented, in almost capsule

form, much of the recent history of American education, discerning appraisals of the contributions of innumerable friends, and praise and blame for many former professors, especially those of Teachers College.

For a "quicky" on psychology see page 95 ("This, therefore, is the whole of psychology on one page"). However, the hurried administrator who needs help in achieving an understanding of conflicting psychologies will find a less brief though clear and helpful interpretation in the chapter on "The Science of Behavior."

But Dr. Rugg is at his best as he returns to his theme of adjustment to technological unemployment. Here he depicts American society of the future, where unemployment has been solved through planning: planning by "citizens councils" and indeed by all people who, while in school, learned to use their minds creatively and there achieved a humanizing spirit. Those who accept "the imminence of the robotizing of heavy industry and the permanent displacement of thirty to forty million men" not only will wish to reconstruct American education but also will want to "invent and install democratic planning and control."

"U.S.A. 1984"

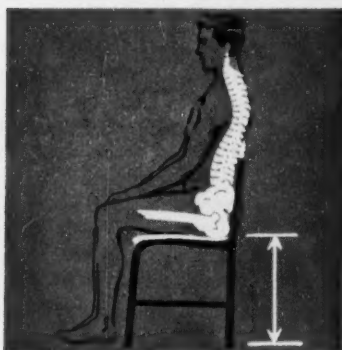
As Dr. Rugg describes it in "U.S.A. 1984": Men are released from heavy labor, millions more men are making and reading charts which reflect the amount and quality of machine production, many great valley developments match T.V.A., all people are at creative work, and artistic motivations are everywhere prevalent. Dying villages are revived, and art, craft, music and political discussions enrich the culture. In this utopian U.S.A., colleges and universities relate their thinking to community life, thus welding efforts of "creative and practical man"; cybernetics has integrated many fields of knowledge; "talented youth are now expected to go into creative occupations, rather than into money-making. The Creative Man is coming into his own!"

Though the author concludes: "My generation is closing its era, coming to the end of its strength. Do not look for too much imagination from my peers. Most of them are through," I believe Dr. Rugg has still to write his most imaginative book, a filling in of exciting details for this final chapter, which I regard as an outline for "Creative U.S.A. 1984."

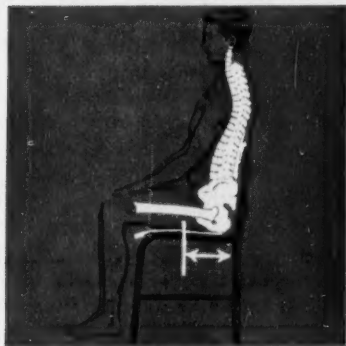
WHAT IS PROPER SCHOOL SEATING?

The deceptively simple and functional lines of the Norcor Tubular Desk and Chair belie the painstaking, careful research and engineering that entered into this design. This school furniture was not built to suit the expediences of manufacturing equipment—it was designed to fit a live, active child in a comfortable, healthful, untiring sitting posture. Support is provided in the proper places so that the child naturally—and comfortably—assumes an alert, attentive position. The slouching back and slumping chest that promotes fatigue, inattention, and that hinder scholastic progress, are discouraged.

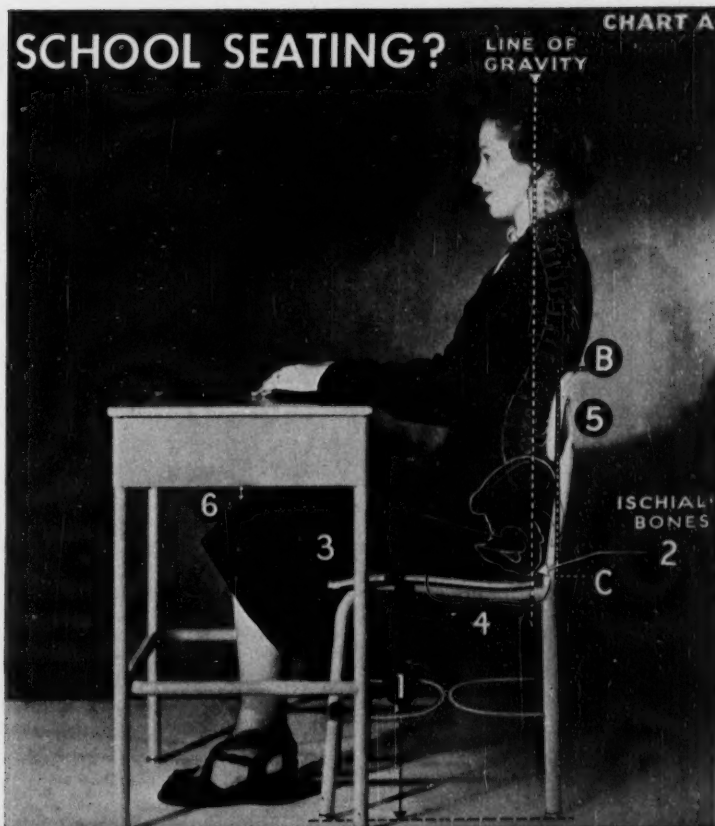
The chart and diagrams illustrate the school seating principles that are incorporated in the design of NORCOR School Furniture.



The most important factor in proper seating is the seat height. The feet should rest firmly on the floor. There should be no pressure behind the knees or thighs on the nerve and blood vessels. The size and shape of the seat and back-rest must be correct for the seat height. See Figures 1 and 5 in Chart A.



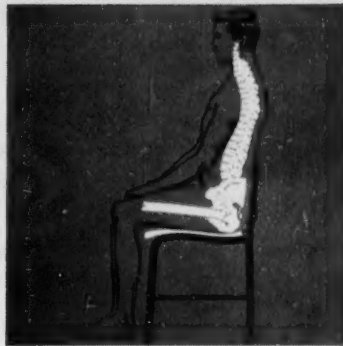
The weight of the body is carried on the Ischial Bones, upon which it is perfectly poised without strain when properly seated. The Ischial Bones of the average student rest on the seat approximately 3" ahead of the line B-C in Chart A, but may normally rest anywhere from the line B-C to a point 7" ahead of B-C.



NORCOR TUBULAR DESKS AND CHAIRS



The back rest and slight backward slope of the Norcor plywood seat helps the Ischial Bones (See Figure 2, Chart A) to find their ideal position on the seat. The Norcor seat is designed to allow for the individual differences in shape and position of the bones, providing a large flat "Ischial Zone."



The backrest properly proportioned and positioned to seat height, supports the trunk in a comfortable relaxed position. Supporting the lumbar region (Figure 3, Chart A) the muscles and internal organs fall into their proper positions and the chest is expanded for deep breathing.

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PUPIL TRANSPORTATION

Book Review by B. P. BRODINSKY

Washington, D.C.

PUPIL TRANSPORTATION. 1953 Yearbook, Department of Rural Education, N.E.A. Pp. 173. Paper-bound, \$2. Cloth-bound, \$2.50.

LOOK at your school bus. Is it merely a machine for carrying pupils to and from school? If so, then the superintendent need be concerned only with using this machine safely and efficiently.

But the 1953 yearbook of the N.E.A.'s Rural Education Department all but scoffs at such an attitude toward the school bus. It is more than a medium of transit. It is one of America's great instruments for widening, broadening and deepening education.

HOW BUSES ARE USED

In addition to being concerned with "pupil miles" and "sparsity factors," the superintendent should pay increasing attention to the "educational uses" of the bus. The yearbook provides many examples of such "educational uses."

In South Coventry, Conn., eighth grade classes use the school bus to visit New York City and its cultural resources.

In Birmingham, Ala., buses carry classes to radio stations, printing establishments, and telephone headquarters to observe these enterprises at work.

In Cedar City, Utah, school buses carry children to annual arts festivals, iron mines, Indian mounds.

In Tipton, Iowa, buses carry pupils to near-by communities for "exchange visits" with other schools.

The total impact of school transportation on children's lives and education has yet to be measured. The year-

book points to a few of the more dramatic changes that transportation has made in rural life and schooling.

1. The school bus has made possible the reorganization of school districts, and reorganization, in turn, has brought modern school buildings, more adequately equipped classrooms, the expanded curriculum. In fact, reorganization and transportation are interdependent. "Without the pupil transportation service school district reorganization could not accomplish many of its most valuable purposes. It is equally true that an effective program of pupil transportation cannot be provided except through a strong, well organized system of school administration," says the yearbook.

2. The school bus has improved rural school attendance. Whereas 20 years ago attendance in rural schools was far below that in city schools, today there is little difference. Rain, snow or sleet—the farm child is brought to school.

3. The school bus is also bringing to school the crippled child regardless of how far away he lives. In a few school systems even children confined to stretchers and wheel chairs are brought daily to their classrooms.

4. The school bus not only takes the pupil to the classroom but frequently brings the classroom to the pupil. Mobile shops and laboratories move across rural highways to bring industrial arts and homemaking facilities to sparsely settled areas.

The daily bus ride teaches pupils ways of living together. It teaches self-discipline since pupils learn that the bus leaves at a definite time and all who ride must abide by the schedule. It teaches pupils to accept one another as they are. Says the yearbook: "Those who live up the farthest hollow and those who live in the palatial farm homes become accepted for what they contribute to the group living. Unity grows, and unity in such diversity . . . enables the pupils to . . . accept . . . that individual differences are an asset

in a democratic society . . . rather than a liability."

Under the guidance of school administrators and teachers the school bus can become a richly endowed traveling classroom. Commenting on what a field trip can do for history students, Supt. G. W. Gerichs, Winamac, Ind., contributes this view to the yearbook:

"It is one thing to read about the attempt on the life of Harrison and quite another to see the actual bullet hole in the window of his home; one thing to read about Tecumseh and his braves counseling with Harrison and quite another to sit on the same lawn and listen to the instructor tell about it. This trip will make history live for those youngsters and is possible only because we have enough publicly owned school buses to carry them."

How the school bus is used for inservice training of teachers is exciting:

"Teachers need to know and understand the community in which they work and in which their pupils live. . . . The school bus can become a means of making all of the community available to every teacher and of bringing about the kind of familiarity which is necessary to the development of a teacher's understanding of the community."

OTHER AREAS COVERED

The yearbook's concentration on the educational uses of pupil transportation gives it its unity and force. But, as is inevitable, the volume contains a small sea of statistics, plenty of history, and hints for administering a pupil transportation service.

The history minded reader may like to spend time on the excellent opening chapter, "Why Pupil Transportation Developed."

The statistically minded will find facts about the bigness of pupil transportation—7,300,000 children ride 120,000 vehicles manned by as many bus drivers and maintained by thousands of mechanics and servicemen.

Those who want hints on managing pupil transportation will find them in sections devoted to preventive maintenance, training of bus drivers, bus inspection schedules, and use of central shops and equipment. The yearbook, incidentally, makes a strong case for publicly owned school buses.

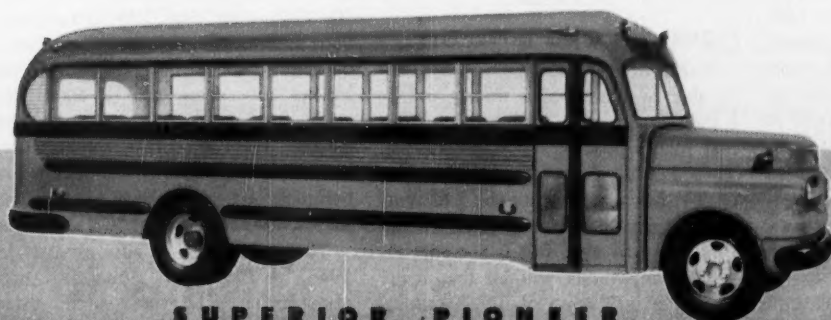
But those whose first concern is to extend and improve educational opportunities for children will find in the yearbook that rare ingredient—ideas that work and can be made to work.

Members of the yearbook committee are: chairman, D. P. Culp, associate professor of education, Alabama Polytechnic Institute; Earl R. Boggs, professor of education, University of Virginia; H. C. Dekock, superintendent, Tipton Consolidated Schools, Tipton, Iowa; John E. King, provost, Duluth branch, University of Minnesota, and John C. Reilly, superintendent of rural education, Willimantic, Conn.



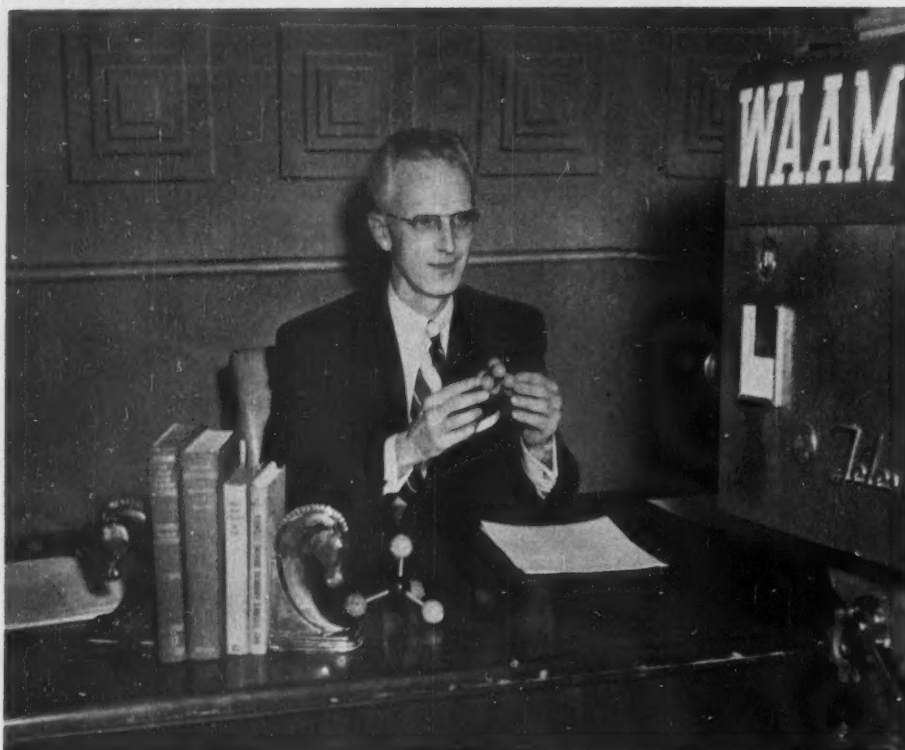
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TELEVISION BREAKS NEW GROUND

EDGAR FULLER

Chairman, Joint Committee on Educational Television
Executive Secretary, National Council of Chief State School Officers

TELEVISION is one of the newer marvels of the scientific age. The end of its development is nowhere in sight. Instead of the present 150 stations and 21,000,000 receivers, there may easily be 1000 stations and 100,000,000 receivers within a decade or two. Nor is this all. Today we have television in black and white. Tomorrow it will be in color. And in time the three-dimensional marvel now appearing in the movies may come to television, and in color. The impact of television on education and culture is only beginning to be felt.

Many governing boards of educational institutions and their professional staffs recognize the potentialities

Dr. Fuller also is a member of the executive committee of the National Citizens Committee for Educational Television.

of TV in education. They want to use it, and a few have plunged into rather deep commitments to make certain their opportunities to do so shall not be lost. Nationwide, however, neither imagination nor action matches the promise of TV itself.

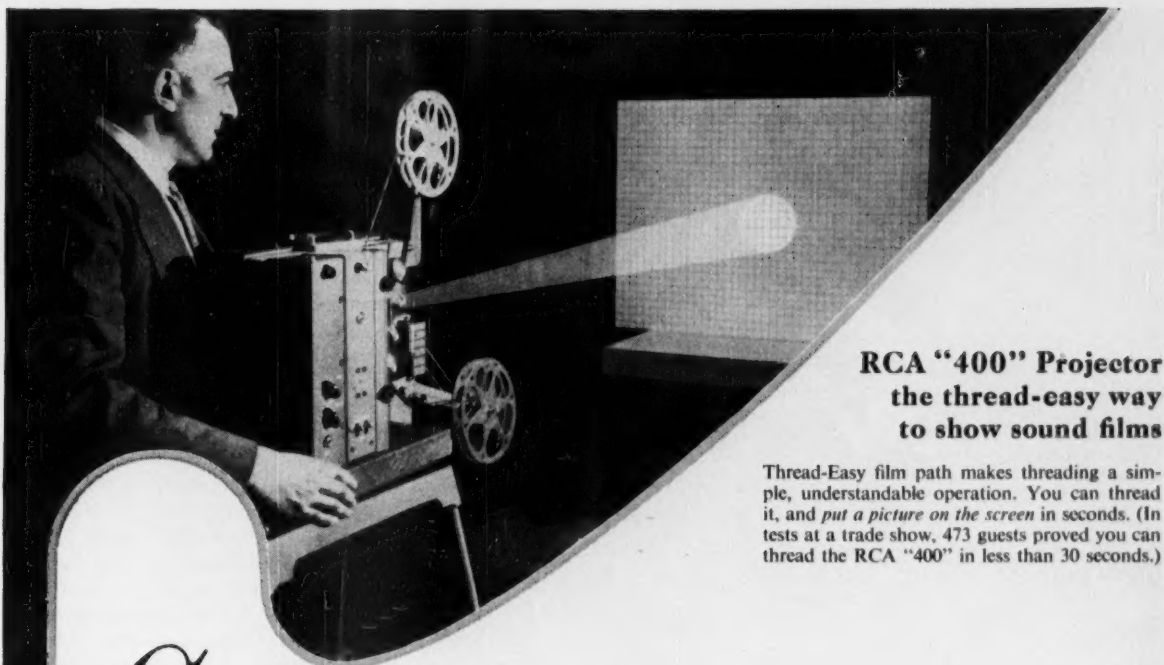
PROMPT ACTION IS IMPERATIVE

This article will discuss how we may be able to do better as time goes on. I shall first review the legal situation that makes prompt action imperative. Then I shall show how the problem of TV has already brought educators together in cooperation as never before, and why even this is not enough. Finally, my thesis will be that really extensive utilization of TV in education now depends largely on the participation of citizens and that educa-

tors in many communities will soon find themselves working with citizens in new patterns of organization to achieve that purpose.

The Federal Communications Commission has the legal authority to allocate television channels. On Sept. 30, 1948, after only 108 stations had been authorized on a case by case basis, the F.C.C. declared a moratorium on further allocations until it could develop a total allocation plan for the nation. Then the F.C.C. worked on an over-all plan for nearly four years before it began to receive applications for some 2200 unallocated channels.

The moratorium on allocations from 1948 to 1952 gave educators their opportunity. The idea that there should be channels reserved for non-commercial educational broadcasting



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High school sophomores deal with the problem of "Cafeteria Courtesy," the telecast being narrated by Patricia Lucy, teen-ager editor of the Evening News in Newark, N.J. The studio is that of Television Research Project of the New Jersey Department of Education at Rutgers.

had cropped up in regard to radio. Influential members of the F.C.C. favored the idea for TV. Seven national groups of educators had asked the F.C.C. during 1949 and 1950, to reserve TV channels for education. On Oct. 16, 1950, these seven organizations* formed the Joint Committee on Educational Television, employed attorneys, and proceeded to argue the case for educational reservations before the F.C.C.

Following the oral hearings, the F.C.C. made its decisions in two steps. On March 22, 1951, a tentative national plan of allocations was announced, including reservation of 212 channels for noncommercial educational purposes. Then the F.C.C. received written statements from all interested parties. On April 14, 1952, a revised plan was issued, with 242 channels reserved for educational use,

*American Council on Education, Association for Education by Radio-Television, Association of Land-Grant Colleges and Universities, National Association of Educational Broadcasters, National Association of State Universities, National Council of Chief State School Officers, National Education Association of the United States.

and the F.C.C. stipulated that no amendments to its total allocation plan would be entertained for at least one year after the plan became effective on June 2, 1952. As matters now stand, prospective commercial broadcasters may enter into competition for the reserved channels after that date.

The Federal Communications Commission requires that noncommercial educational TV facilities must be available to all educational interests of the community. Interpreted reasonably, as we must assume it will be, this requirement is laudable because the single noncommercial educational channel must serve all. Public and private elementary schools, secondary schools and colleges, not to mention cultural institutions, such as libraries, museums and symphony orchestras, must be brought together in a concerted plan to utilize each reserved channel.

Often the representatives of these schools and other institutions have been so unknown to one another that they have had to be introduced before they began to work together. Cooperation in a new dimension is necessary. The lack of precedents for

joint action of this kind, legal doubts, variations in educational purposes among the institutions, personalities—all the problems these bring are superimposed on the strange, difficult and expensive task of establishing and operating an educational TV station. Considering the problems, there has been great progress toward TV utilization in education during the last year.

Thus far the commonest pattern of community agreement provides for the receipt of an F.C.C. construction permit, and then an operating license, by a single educational institution. Matters of programming and general control can be decided in advance of actual operation only in broad outline, so provisions are made for a continuing joint board or other continuing authority representing all major participants. Even financing may have to be determined largely by such a board. Under this arrangement, however, the individual institution holding the license is legally responsible to the Federal Communications Commission for meeting federal requirements. Thus the licensee will have a special interest in and responsibility for the program of the station, even when the general policies are established by a representative board.

In a number of states there has been planning directed toward the formation of state educational television systems. These do not in general contemplate "live" networks. Each community having a station will doubtless have a local programming board, even when the system is organized through the leadership of state educational agencies, such as departments of education or universities.

ANOTHER PATTERN IS FOUND

Another developing pattern of organization is found when representatives of the leading participating institutions, including both educators and members of governing boards, form a nonprofit educational corporation to receive the construction permit and the license to operate the station. This is the growing edge of organization for educational TV, especially when laymen who are not members of governing boards of institutions are also included in the corporation. Before examining the implications of this development in more detail, let us see what is bringing it about.

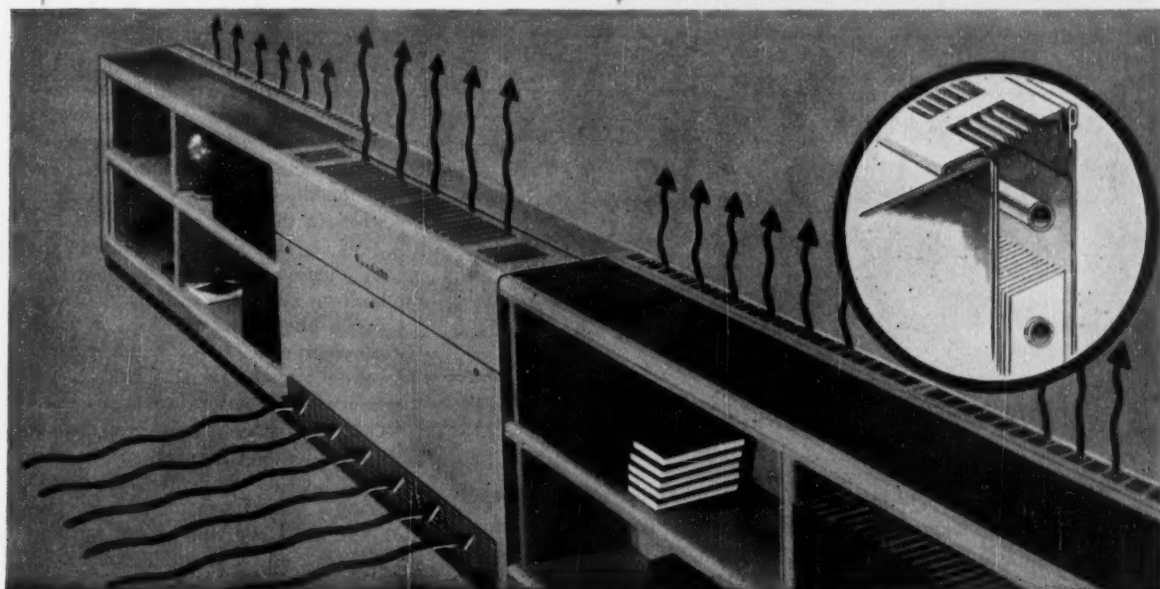
Educational institutions, as represented by their governing boards and professional staffs, are typically under

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a variety of pressures and conflicts that interfere with beginning any such new projects as the operation of a television station. With rare exceptions funds are scarce, especially for new programs in competition with expenditures to improve those already established. Low salaries of teachers and overcrowded facilities cannot be ignored. These are examples of immediate problems so pressing that it is difficult to look ahead. Even though the educators and their governing boards recognize the great educational potentialities of television, they may agree with a large part of the general public that they should use their present resources to solve their present critical problems. In the sense of immediate and mandatory educational needs, educational television ranks low.

The truth seems to be that, with some exceptions, even community-wide agreement of educators and governing boards does not ensure enough financial and public support to construct and operate a TV station. There must be new support, and it is coming from citizens with clear insight into

the future and some detachment from pressures of current educational needs. They are intelligent and foresighted citizens not closely identified with schools or colleges, and they will soon be found in considerable numbers on noncommercial educational television boards.

Educators should welcome this sort of lay-professional participation outside the regular lay board-professional administrator pattern. It is a natural step beyond the professional cooperation achieved by the seven national organizations comprising the Joint Committee on Educational Television, a situation in which even such great organizations as the National Education Association and the American Council on Education have agreed that authority to make decisions which fundamentally affect the entire field of educational television is vested in the J.C.E.T. itself. It is a natural step beyond even complete community-wide cooperation of all educational and cultural groups. It is bringing new strength to the effort to develop educational TV for the present and to

preserve its greater potentialities for the future.

The National Citizens Committee for Educational Television is at work, under the honorary co-chairmanship of Milton S. Eisenhower and Marion B. Folsom, to help save the reserved channels for education. Its local counterparts may in some instances turn out to be unorthodox in a jurisdictional sense, especially where educators have been slow to organize, but they can assist the governing boards and the educators to establish educational television in communities where educators and their governing boards could hardly be expected to do so alone.

HERE IS A NEW FIELD

Here, indeed, is a new field in educational administration. There is no established joint authority to represent this educational and cultural interest of the community, because the F.C.C. has ruled out local political governments. There is, astonishingly enough, an organizational vacuum in a number of communities where some sort of joint authority for educational TV must eventually be organized. These joint authorities may turn out to be noncommercial corporate boards composed of members of governing boards of schools and colleges, educators, cultural leaders, and public spirited citizens not connected with formal education who believe in educational television. Leadership and imaginative insight are widespread in American communities, and they will assert themselves in this field as in others.

Thoughtful educators and citizens are interested in what television does both *for* education and *against* education. They want television to make education easier rather than more difficult. A more favorable balance will result from operation of noncommercial educational stations, a number of which are now assured. The future should also bring *more*, rather than *fewer*, educational broadcasts over commercial stations. Even so, most TV programs will continue to be commercially sponsored and directed to mass audiences, and all affect education. We must learn to evaluate all television programs in terms of their educational effects, just as advertisers evaluate them in terms of sales. We must make our evaluations a powerful factor for better programming, because we want television to improve our culture rather than debate it.



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THE SCHOOL LUNCH



The school lunch becomes a pleasant learning situation as well as a definite health asset.

being taken advantage of for the stimulus of creative activities? What coordination is there between the school lunch and the health lessons in the classroom?

Specifically, how do children come into the lunchroom? Have they washed their hands? What meets their eyes? What do they hear? How do they conduct themselves? Are eating and good manners compulsory? How long do they stay? How are they supervised? How are they entertained? What are their responsibilities for cleaning up? What opportunities do parents have to become acquainted with the procedure? What follow-up teaching goes on in the classroom? Are the children more and more aware of their good fortune to live in a country which offers so many advantages?

BENEFITS ARE NUMEROUS

Often the benefits from the school lunch program are limited to the obvious ones of a well balanced lunch, because it is not recognized as an experience through which highly desirable learning of many things can be accomplished through *doing*. The school lunchroom can be an extensive laboratory in which can be learned many acceptable modes of behavior, can establish good habits and high standards, can offer children many pleasant times spent not only in eating but also in creative activity, the time and facilities for which are so often limited in the classroom.

The finest administration of the school lunch program falls far short if the administrator achieves only a well balanced menu, good food, sanitary conditions, balanced reports—highly important surely but only part of the program. The administrator must be alert to the many other possible phases—be personally interested, believe in the lunch's importance and be able to lead and guide the entire staff, all of the children, and the community in recognizing and enjoying the numerable benefits.

The success of the school lunch program is highly dependent upon the leadership of the principal. His first step is honestly to believe in the program himself to the extent that he will

The school lunch can be the

HIGHLIGHT of the school day

EVELYN McINTYRE

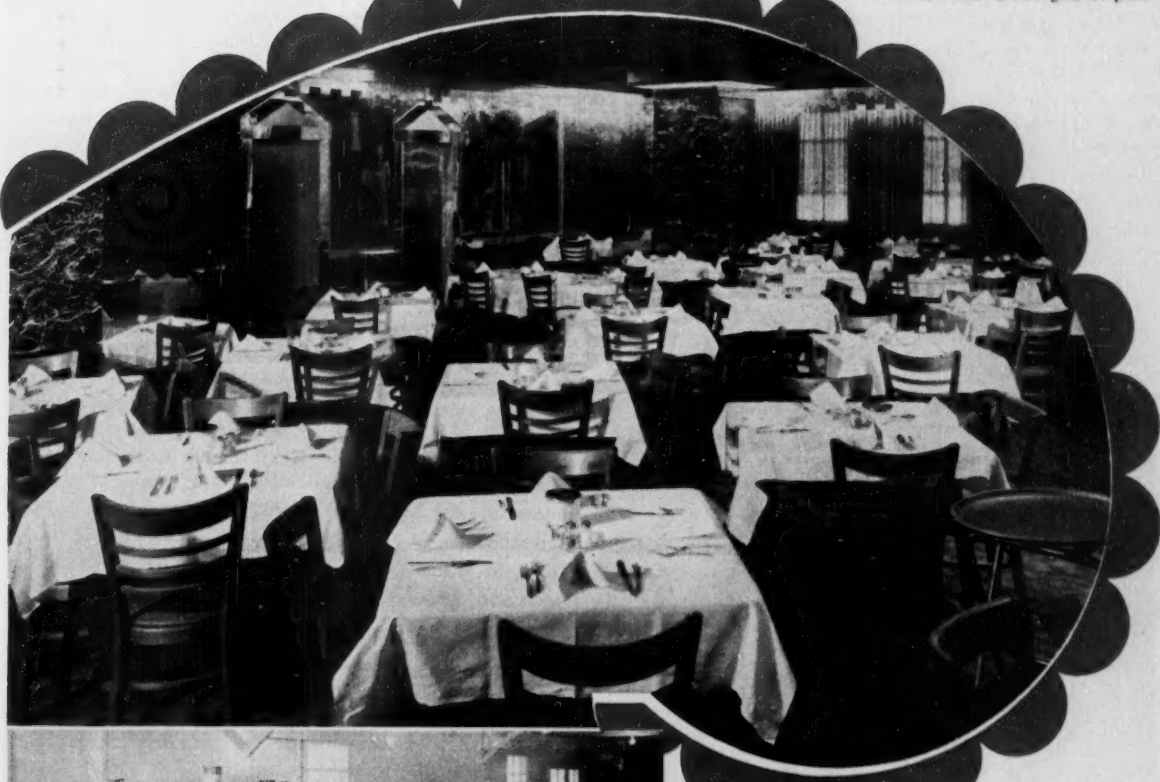
Principal, Kimball School
Hayward Elementary School District
Hayward, Calif.

THE school lunch, if all of its possibilities are capitalized upon, offers one of the finest opportunities to realize the first cardinal principle of education—health.

However, providing a good lunch is only *one* of the possibilities in the field of health. Is the lunch period a time of pleasant relaxation or of noisy disorder—a threat to mental health? Do the children have time to rest after

eating, or do they gulp their food down so as to run out to play—a threat to physical health? Is the environment attractive and the food colorfully appealing and correctly served? Are good table manners, thoughtfulness for others, and courtesy being practiced? Is this daily meeting of the group being used for group activities to promote social responsibility and group spirit? Is the audience situation

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give extra time to participate actively in exploring its possibilities. He can't do this by administering it from his office and then going out to lunch during the lunch hour. He has to be a part of the lunch program, seeing and doing! He must be sold on it himself!

Next, he must sell his staff on its importance and its possibilities and establish a climate in which they will function as a whole to make the lunch program succeed and will be free to use initiative to help improve it. Each teacher, secretary, lunchroom worker and custodian must feel that the success of the lunch program is one of

his major responsibilities. Each one must recognize the lunch hour as a time in which he can teach some of the things taught only in a limited manner in the classroom. Cooperative effort is essential here!

Then the principal must instill in the children the highest respect for this part of the school day, guide them in their attitudes and conduct, provide for their likes and interests, and help raise their standards of behavior in relation to eating.

Finally, he must sell the community through parents and interested organizations on the worth of the school

lunch program and the valuable experiences it offers children.

The following describes one organization of the school lunch program through which are accomplished some of these desirable outcomes. The advantage of opening a school lunch program in a beautiful new multipurpose room, modernly equipped with the best possible facilities, was capitalized upon. From the polished floor, the plastic covered tables, the colorful draperies and the public address system to the acoustical tile ceiling every detail made for better and pleasanter use. Children were quick to appreciate these surroundings and responded to the appeal to keep their school beautiful. Even the custodian took pride in helping to keep it immaculate. Student committees were formed to provide flower arrangements for the tables. The bulletin boards were decorated with seasonal displays appealing to children, with emphasis on health.

Staff members had a number of meetings in which they carefully planned the lunchroom procedure. Children were told what to expect. A few days before the lunchroom opened youngsters in each class went with their teacher to the lunchroom for a free snack of orange juice and a sandwich. At that time they were given instruction and practice in correct procedure. The careful teaching that each teacher did here paid dividends many times.

Each child must feel that all of this is for him. Each child should have an equal chance to eat here. The Mothers' Club made this possible by agreeing to finance a free lunch for each child in the school during the first week. This had an added advantage of catching the immediate interest of the parents' group in the success of the program. Each class had a day on which all members and the teacher sat at the "party lunch" table which their committees had decorated. After his turn as honored guest, each child wanted to continue to have a hot lunch—it was "the thing to do."

The teachers arranged their subject schedules so as to have some type of quiet activity, such as a library period, directly before lunch, which allows time for each child to wash his hands before eating. Health lessons taught out of a textbook have little value if children are not provided with time to practice this health habit.

Classes are not dismissed all at one



No crowding, no pushing is a lesson the well regulated school lunch is able to teach.

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time for lunch. Rather they are called over the telephone at intervals so as to arrive at the lunchroom a few minutes apart. The teacher accompanies each class and remains with the children until they are seated, at which time the teacher on lunch duty assumes responsibility. As the children approach the lunchroom, they are greeted with music which plays during the period as planned by the teacher on lunch duty.

The children in each class sit together at a table, those bringing their lunch sitting with their classmates.

Pupil leadership and class pride help in maintaining courtesy and neatness. There is no blowing of whistles or loud commands; rather an adult is close at hand if some pupil needs a quiet reminder that his conduct is not according to the standards of the group. Any announcements are made over the public address system. Children are not forced to clean their plates, but "seconds" are only for those with clean plates. The lines for "seconds" form rapidly. The stimulus to good eating comes from pleasant surroundings, flowers on the table, music,

colorful, good tasting and smelling food, and all one's friends eating, chatting, enjoying themselves.

All children remain in the lunchroom for half an hour. This discourages gulping food so as to run out to play and provides a few minutes of relaxation after eating. They love this time also for what it has to offer. They entertain one another with a program of songs, skits, jokes, riddles, plays, stunts, stories and so forth. This is under the direction of a pupil master of ceremonies with the help of the teacher on lunch duty. Sometimes there are recreational singing, school yells, a special story.

Children are then dismissed one table at a time. This may seem formal but isn't in the smooth, courteous way it functions. The spirit of everyone concerned is of friendly helpfulness to make feasible the greatest possible enjoyment by all. Praise takes the place of commands. The school lunch becomes a pleasant learning situation as well as a health asset.

Any chances to point this out to the community are not overlooked. Parents are welcome to come to observe the lunch hour and always leave with pride at seeing the self-reliance of their child, how well he eats, how much he enjoys himself. They are particularly interested in the opportunity for their child to perform with such ease before an audience.

PARENTS INVITED

Parent groups are invited to have lunch at school on special occasions. The executive board of the Mothers' Club has a luncheon meeting once a month. So has the Parent-Administrators Council. Parents have no doubts when they see for themselves. Criticism need not be feared when praise is forthcoming. Public relations are healthy here!

Many fine, meaningful health lessons are developed in the classroom, with the school lunch used as a basis of discussion. The children learn to designate the food value of each dish on the menu, what constitutes a balanced diet, a respect for sanitary conditions, and so forth. They know of what they speak. The speaking, in turn, ensures greater participation in the school lunch program with the benefits thereby reaching more of the pupils.

Yes, the school lunch can be the highlight of the school day if the principal focuses on it!

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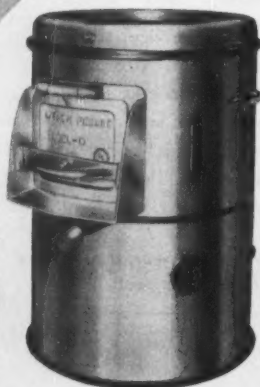
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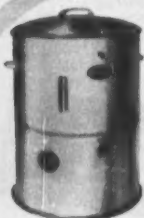
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EXTERIOR MAINTENANCE

of school buildings

ALFRED C. LAMB

Director, Division of Buildings and Grounds
Wayne University, Detroit

MOISTURE, sunshine and frost are enemies of all buildings regardless of the materials used in construction. This is true in all climates but is especially true in areas where the climate varies over a wide temperature range and where rainfall is plentiful.

Buildings subjected to extreme cold and heat and to alternate periods of rain and sunshine, expand and contract, absorb moisture, and lose it through evaporation. These processes tend to break down building materials and to shorten the life of the structures built by man to house his various activities. Water is man's greatest enemy in his struggle to preserve buildings. Add to water extremes of heat and cold, and the maintenance problem then becomes really serious.

Exterior maintenance is designed to slow up the ravages of climate, to lengthen the life of buildings, and to keep them comfortable to live in.

Steel, stone, brick, mortar, wood and all other building materials are affected by moisture. Steel rusts when subjected to moisture. The resulting rust scale expands in every direction, forcing building materials adjacent to it away, as in the case of steel sash, where mortar, brick and stone are forced out of position around windows. Stone, wood, brick, concrete, terra cotta and stucco absorb moisture. In warm weather the water evaporates, but in cold weather it freezes and expands, pushing mortar out of joints and breaking chips off the face of stone, brick and terra cotta.

The maintenance crew is in constant conflict with the elements to prevent this deterioration. A battle is constantly waged to keep moisture out by making sure that joints are tight and that surfaces are painted. The materials used are many and varied. Paints, lacquers, plastics, asphalt, tars, resins, putty, caulking compounds, mortar, metal for flashings, impregnated rag papers, and fabrics are some of the materials applied to exterior surfaces.

When masonry forms the exterior surface, the most important factor in maintenance is keeping joints tight. Mortar joints shrink, loosen up, and are either pushed out by frost action or crumble and fall out. In some cases the mortar adheres to the stone or brick on one side of the joint while it has pulled away from the other side, leaving a crack through which water can enter. The only solution is to rake or chip out the joint to a depth of $\frac{3}{4}$ inch and tuck point it, using good mortar, a mixture of Portland cement, lime and sand.

Figure 1 shows a workman chipping out such a joint in the stone work of a 60 year old building. It was first necessary to remove the ivy vine covering the wall. Back of the workman can be seen a section of vine not yet removed. If the vine is cut off above the ground and removed from the wall it will grow back again in a few seasons.

Figure 2 shows the second step in repairing the open joint. Here the

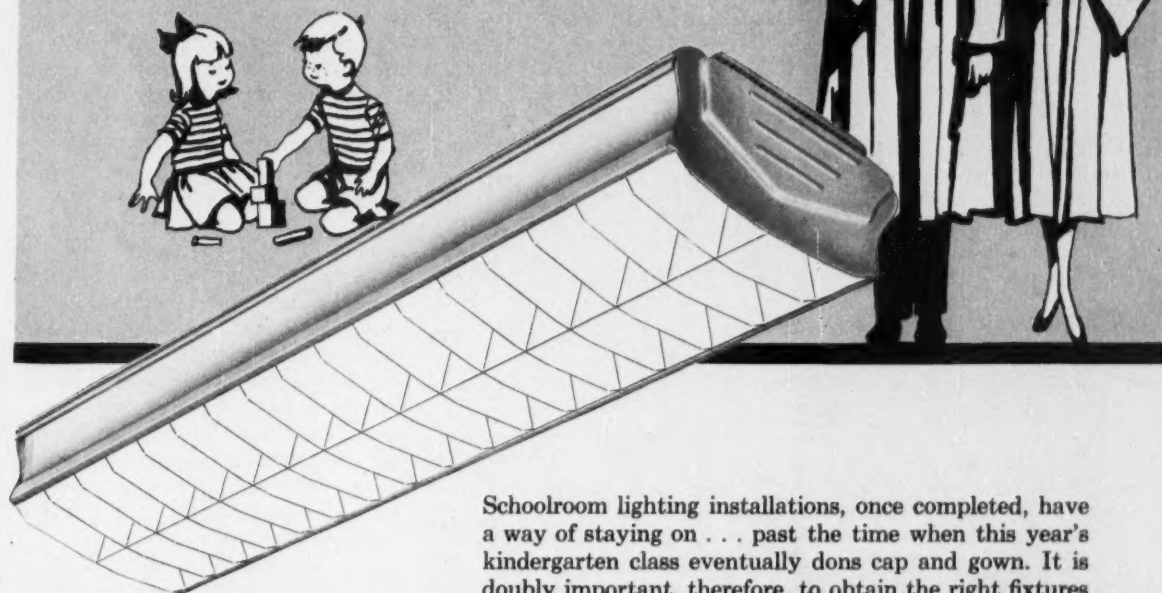
Figure 1



Figure 2



Garcy Visualiers *will see them through!*

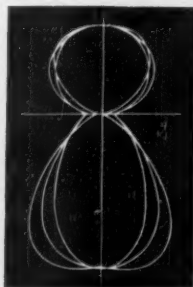


Garcy "Visualiers" provide full 45° shielding *plus illuminated side panels*. The "Visualier" Series is available in 2 lamp and 4 lamp units, for 4 ft. standard as well as 4 ft. or 8 ft. slimline lamps.

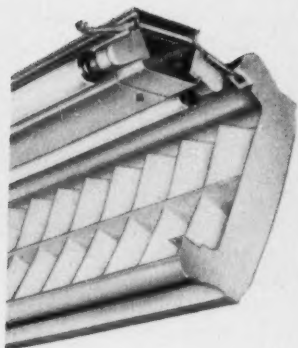
Schoolroom lighting installations, once completed, have a way of staying on . . . past the time when this year's kindergarten class eventually dons cap and gown. It is doubly important, therefore, to obtain the right fixtures in the first place.

Garcy's "Visualier" is eminently qualified. Lighting efficiency far exceeds I.E.S. and A.I.A. school lighting specifications . . . as to light utilization, light distribution, shielding and low surface brightness.

Of equal importance, the "Visualier's" high level lighting efficiency can be readily maintained. The large louver cells are easily cleaned from the floor with a brush or vacuum. All-metal construction means no breakage or warping. Garcy's exclusive one-piece louver design contributes time-defying durability. Detailed literature and E.T.L. data will be sent on request.



Louver shield consists of a one-piece stamping . . . an exclusive Garcy development. No rusting of welded parts . . . no loosening due to vibration . . . and far more inherent strength.



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Figure 3



Figure 4

stone mason is tucking new mortar into the joint with a pointing tool. Just below and to his right is a newly completed vertical joint. Such joints will probably be good for the life of the building. For this type of work mortar should be used, *never* caulking compound. To use caulking compound for mortar joints is a waste of time and material. The caulking compound will bleed into the masonry and in a few

years will dry out, and then the work will have to be done over again.

Little equipment and only a small amount of material are necessary for tuck pointing. The largest item affecting the cost of this operation is for labor needed for pointing and for erecting the scaffolds. However, money spent for pointing will save a great deal for internal maintenance.

Painting, another operation in the

field of exterior maintenance, has two purposes: first, to protect the surface of wood, metals and some classes of masonry, and, second, to decorate and beautify. A good exterior paint forms a moisture-resistant skin over the surface, whether it is wood, metal or masonry. Paint is manufactured in a variety of classifications in all the colors of the spectrum and in many combinations of these colors and for a long list of purposes. Exterior paints are primarily designed to protect the material covered by preventing moisture from penetrating the surface. Moisture entering wood causes deterioration by swelling the fibers, thereby opening cracks, which result in rot. When moisture comes in contact with steel, rusting takes place, and the steel soon is destroyed. The proper paint film maintained over the surface of the metal will prevent rusting.

The materials used for these paints vary depending upon the material they are to cover and protect. The manufacture of paint has progressed in modern times as the chemical industry has developed new materials, until the ready mixed paints available today are better and more easily applied than are hand mixed paints. However, there are still many painters, and a few architects and builders, who think lead and oil mixed and colored on the job are superior. Experience indicates, however, that better results can be obtained by using the manufacturer's product as it is delivered in ready mixed form. Money is saved by having the manufacturer mix the paint by machine, for at the present rates of pay for painters it is extremely expensive to mix the paint by hand.

Figure 3 is a photograph of the window in the same building shown in Figures 1 and 2. The painter is preparing the window sash and frame for caulking and repainting. The old paint consisting of several coats has cracked and blistered, leaving a surface that is so rough another coat over it will not satisfactorily cover. The painter is removing the old paint by means of blowtorch and scraper; next he will sandpaper the sash and frame. In the preparation process all old loose putty will be removed, the wood underneath will be painted, and new putty will be applied. Next, the old caulking compound in the groove between the window frame and the masonry will be removed and replaced with new caulking compound. Figure 4 shows the use of blowtorch and

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When caulking compound is furnished in cans and drums it takes several minutes to load the gun and is messy and wasteful of material. The cost of cartridges is slightly higher than the cost of the compound in bulk, but the saving of time more than makes up the difference in cost. In addition to cost there is time saved in cleaning the outside of the gun every time it is reloaded, and workmen appreciate the fact that the cartridges are cleaner and easier to handle.

Figure 5 has been included to demonstrate what happens when painting is postponed beyond the safe limit. The rotted wood is clearly visible along the

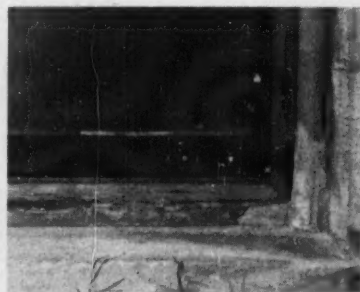


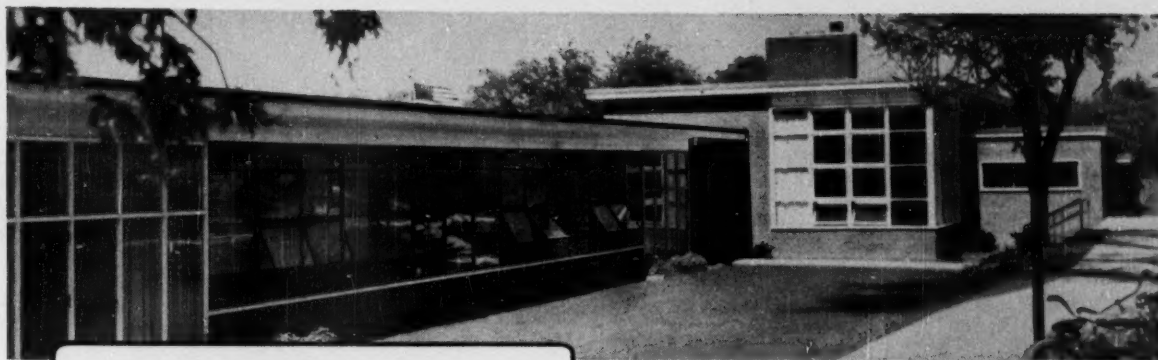
Figure 5

sill and up the side of the frame. This frame is beyond repair and will have to be replaced at considerably higher cost than several paintings would have totaled. The sash itself shows deterioration and loss of putty. This lack of maintenance represents poor economy.

Good exterior maintenance requires eternal vigilance to discover points where masonry joints have opened, where painted surfaces have deteriorated, or where putty or caulking compound has fallen away. When these defects are observed, prompt action in repainting or resealing is required. Such watchful care will prolong the lives of buildings by many years and will result in savings of cost for construction of new buildings or renovation of old ones.

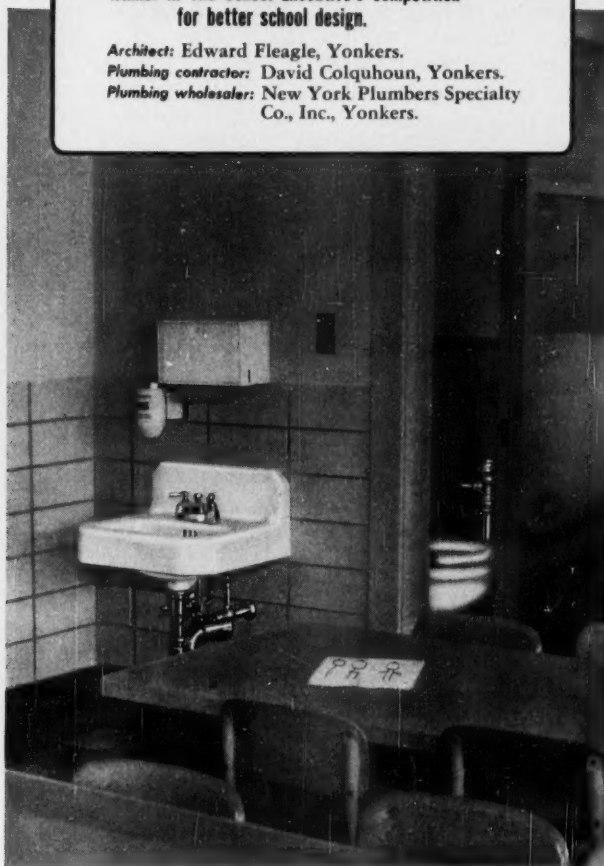
• • •

Next Month: A second article on exterior maintenance will be concerned entirely with roofs.



Colonial Heights Elementary School, Yonkers, N. Y.:
Winner in The School Executive's competition
for better school design.

Architect: Edward Fleagle, Yonkers.
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TYPICAL OF THE COLONIAL HEIGHTS SCHOOL'S MODERN DESIGN is this arrangement of plumbing fixtures in a number of the classrooms. A lavatory is located in the room, with a toilet installed in a small room just outside. Good-looking, easy-to-clean American-Standard fixtures are shown here.



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wire from **Washington**

Expensive misstep

► It was a misstep in administration that brought the Office of Education to the lowest point of its 85 year old history. What happened was this: When the Korea G.I. bill was enacted, Commissioner Earl J. McGrath saw an opportunity for service. "It is our obligation to make educational audits of the veterans educational program," Dr. McGrath said, and proceeded to set up the Veterans Educational Services Division for that purpose. He was told by the White House and the Bureau of the Budget (of the Truman administration, that is) to go ahead. He did—spending about \$250,000 of his regular appropriations on the assurance (from the Bureau of the Budget) that Congress would make good the deficit.

But Congress, the second factor responsible for the trouble in which the Office finds itself, not only failed to vote money but ordered Dr. McGrath to stay out of the G.I. educational program. It was a new Congress, a Republican Congress, and not the one which had passed the Korea G.I. bill.

Federal Security Administrator (now Secretary) Hobby instructed Commissioner McGrath to make good the deficit by enforcing the most drastic series of economies any small agency has ever been subjected to. The commissioner complied.

He abolished the Veterans Educational Services Division. He sent dismissal notices to 53 members of the staff and sent out a warning signal that 43 additional positions in all parts of the Office may have to be wiped out. He stopped all travel, all conferences, all printing. A series of "bumping" operations began, during which employees with many years of service had to give way to those with veterans preference. Morale sank, as one employee out of every five began wondering if his job was to go next. N.E.A.'s Federal Relations Division sent out a bulletin describing the plight of the stricken federal agency. The American

Association of University Women appealed to Mrs. Hobby. But otherwise there was little demonstration of sympathy. Congressmen are still not aware of the disintegration that has taken place.

Madam secretary

► Congress has created a new Department of Health, Education and Welfare with Mrs. Oveta Culp Hobby as its secretary. Admiration for Mrs. Hobby is running high in Congress. Both senators and congressmen feel that she will appoint a good advisory committee on education for the department, as has been requested by President Eisenhower.

But when educators take a closer look at the new department they see no cause for hosannas.

The department, known as H.E.W., is a huge establishment of 37,500 employees, spending and distributing a total of \$2,000,000,000 to \$3,000,000,000 a year. Biggest units are the Public Health Service (16,160 employees) and the Social Security Administration (15,000 employees). The Food and Drug Administration employs a mere 1000; the Vocational Rehabilitation Service, 117. Wedged in between the goliaths and the midgets is the Office of Education with some 458 persons on its pay roll (before the near-decimation began).

There is evidence that Secretary Hobby's first concern will be with public health and the organized doctors and her second concern with social security and the organized welfare officials. These groups wield great political influence in the states and back-home communities. It is the acquiescence of these interests, especially the medical profession, that made possible the creation of the department.

To acknowledge the debt to the organized doctors, the President had agreed to create a special assistant to the secretary on health and medical affairs. No such honor is accorded education.

It is assumed that the commissioner of education will have direct access to the secretary, although in practice he may have to clear through one of the two assistant secretaries.

There's an interesting section in the law creating H.E.W. It reads: "No professional . . . function vested by law in any officer shall be removed from the jurisdiction of such officer. . . ." This means that the commissioner of education is (legally) still responsible for administering the land-grant college act and the vocational acts.

But in practice this section of the law may not mean much. For example, the Korea G.I. bill *does* give the commissioner "professional function" to review the educational standards of veterans' training. When Congress refused to underpin this authority with money, the Veterans Administration stepped into this vacuum.

As a result, schools and colleges will now be visited by individuals carrying the title of "educational benefits representatives" to see whether all provisions of the training law are carried out. Primarily check-disbursing agents, they now add to their functions a review of the veterans' course to see if he is making "satisfactory progress," and they will stop the monthly allowances of any veteran who is taking a course that "fails to meet the standards set up by law."

To sweeten this bit of intrusion into education, the Veterans Administration renamed the central office responsible for "checkups" from Registration and Research Service to Educational Benefits Service.

Payless holiday for U.S.O.E.

► Nearly 300 U.S. Office of Education staff members have been ordered to go on a six-day payless holiday. Furloughs will be staggered so that major Office services will continue uninterrupted.

The order affects all Office of Education employees, except veterans and staff



protecting his eyesight is our mutual responsibility

Intelligent selection of lighting fixtures for school lighting demands consideration of 6 BASIC FACTORS:

An abundance of glare-free light on the desks with enough overhead illumination to eliminate disturbing contrasts and sufficient overall light to create a pleasant, comfortable atmosphere.

Initial cost is increasingly important with today's high costs and limited budgets. High quality, low-cost fixtures are essential for long term lighting investments that are economically sound.

Maintenance must be effectively simplified. Fixtures that are difficult to clean or that require constant attention are costly to maintain.

For economy's sake, fixtures should be designed so the installing electrician may install them quickly and easily in any school room regardless of size and construction.

Modern classrooms demand fixtures with a truly modern smart appearance. Smartly engineered, attractively designed luminaires enhance the appearance of any classroom.

School lighting fixtures should be sturdily constructed for years of trouble-free service. There should be no glass parts that are subject to breakage.

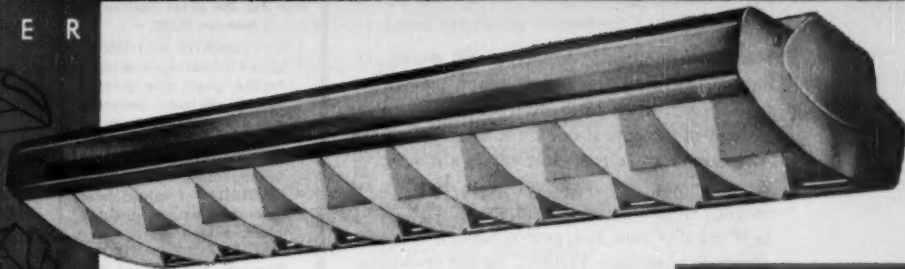
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Smithcraft EYE-Q

Smithcraft

LIGHTING DIVISION

CHELSEA 50 MASSACHUSETTS

... long a number one favorite for school and classroom lighting the country over, meets each of these requirements ideally. Priced to meet the average school budget, the Eye-Q is designed for extremely high lighting efficiency and sturdily-constructed for years of trouble-free service. See the Smithcraft Eye-Q before planning any school lighting or relighting project. And write for our school folder describing the Eye-Q and other great fixtures in the Smithcraft line. There's a Smithcraft fixture for every school requirement.

Here it is!

The duplicating machine you asked us to build — A machine that will fulfill all school requirements at a price schools can afford.

Presenting the NEW
Old Town
MODEL 95 — SCHOOL
COPYMAKER

WITH *Cyclomatic Action*

ONLY
\$175*



*PLUS FEDERAL EXCISE TAX

NOW . . . A spirit duplicating machine especially engineered and designed to handle the hundreds of different school jobs. Built to OLD TOWN's rigid specifications of top quality — for rugged school use — high-speed production.

Here's the finest little duplicator that money can buy — featuring "cyclomatic action" which assures faster, more brilliant reproductions. Produces 1 to 6 colors at one time, in split seconds. Makes over 140 clean, clear copies a minute, of anything you type, write, print or draw — on varying weight paper or card stock; 3" x 5" up to 9" x 14". Clean, fast, easy to handle. Write for illustrated brochure TODAY on the revolutionary new OLD TOWN Model 95 Copymaker.

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Model 95
COPYMAKER

Has ALL the usual Duplicator features PLUS: —

- **CYCLOMATIC ACTION** — Sealed in bearings and high-tension gears give greater speed, efficiency, economy and a life time of service
- **FLUID CONTROL** — Prevents excess moisture and results in instantaneous drying
- **SINGLETTIE** — Patented sheet separator prevents waste and blank sheets
- **WIZARD COPY CONTROL** — Regulates brightness of copies or length of run

School Supply Houses:

The many unique and exclusive features of this new OLD TOWN Model 95 Copymaker assure you repeat business. Write TODAY for complete dealer franchise information.



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Made by the manufacturers of world-renowned
OLD TOWN Carbons, Ribbons, Duplicating Machines & Supplies

members of the Vocational Education Division. Legal provisions protect these employees.

The drastic move is part of an effort to make up a quarter million dollar deficit incurred because of the establishment of a Veterans Educational Services Division. Congress ordered it abolished and refused to vote the money that had been spent to operate it from August 1952 to March of this year.

Segregation on army posts

► "It's the irresistible force of the federal government pitted against the immovable state constitutions and laws." That is the way one federal official described President Eisenhower's directive that the military put an end to segregation in schools which are located on defense installations but which are operated as part of the various state school systems.

Affected are the states of Alabama, Arkansas, Florida, Maryland, Oklahoma, South Carolina, Texas and Virginia. The constitutions of some of these states and the customs of all of them will not tolerate mixed schools, even though the teaching is carried on in U.S.-owned buildings and is supported by U.S. money.

These are the "complicating factors" to which the Federal Security Agency and the secretary of defense referred when they revealed President Eisenhower's decision that segregation must go on military posts.

Secretary Hobby of health, education and welfare has a document on her desk which lists in detail the legal problems the federal government will encounter with each state in this brave effort. At the same time, military commanders on the posts are making on-the-spot surveys to see what they can do locally to carry out President Eisenhower's wishes. It appears that at least two approaches may have to be made to achieve de-segregation:

The federal government may have to negotiate agreements with each state to enable army, navy and air force post commanders to end segregation; at the same time, post commanders may have to do some wheeling and persuading with local people to accomplish the same purpose.

By contrast, ending segregation on army post schools operated entirely with federal funds was simple. Only one school at Fort Benning, Ga., separates Negro from white pupils and by next September this practice will stop.



Why is it so easy to teach on the new Royal Standard?

ROYAL STANDARD has always been a preferred typewriter by teachers and students alike because of such features as . . .

. . . scientific positioning of keyboard and controls, "Magic" Margin, "Touch Control," and all the famous Royal advantages.

But now comes the *new* Royal Standard, and it offers you all these features and several *more*.

1. "Magic" Tabulator. A roll of the hand, without moving fingers from the important guide-key positions, activates the "Magic" Tabulator. Speeds teaching of tabulation.

2. Carriage Control. Synchronizes carriage speed and type-bar action. A twist of the knob adjusts carriage speed for normal typing, or for stepped-up speed spurts or columnar tabulation.

3. Time-saver Top. A Royal exclusive. Press button . . . inside controls all instantly accessible. "Touch Control" within easy reach. Easy-to-get-at spools for ribbon changing.

You can see at once why the new Royal Standard is now more than ever the typewriter preferred by teachers and students.

Why not ask for a classroom demonstration?

STANDARD • ELECTRIC • PORTABLE

ROYAL

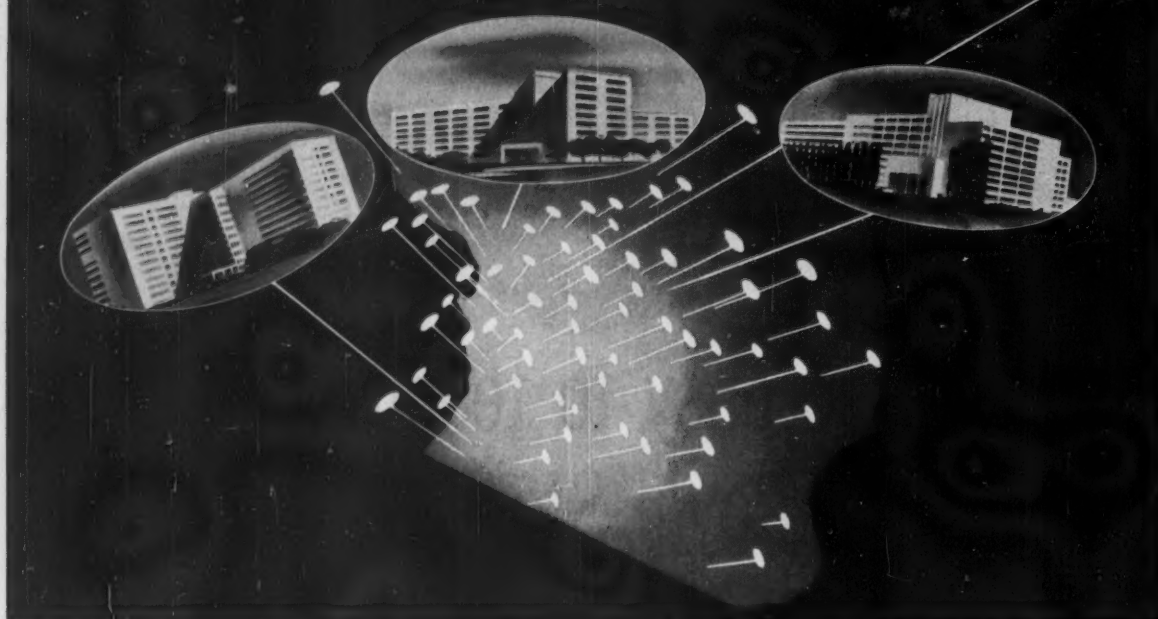
Roytype Carbons and Ribbons

"Magic" and "Touch Control" are registered trade-marks of Royal Typewriter Company, Inc.

the Hospitals of Southern California

Cook With **GAS...**

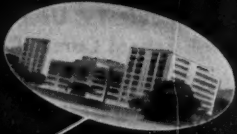
the Dependable, Modern Way of



Alvarado Hospital
Anaheim Hospital
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Belvedere Hospital
Brothers of St. John Hospital
Burbank Hospital
Calexico Hospital
Camarillo State Hospital
Centinela Hospital
Children's Hospital
Coleman-Smith Hospital
Community Hospital
Cottage Hospital
Covina Hospital
Culver City Hospital
Doctor's Hospital
El Encanto Sanitarium
Fort MacArthur Station Hospital
Foster Memorial Hospital
French Hospital, Los Angeles

French Hospital, San Luis Obispo
Fullerton Hospital
Garden Grove Sanitarium
General Hospital, Los Angeles
General Hospital, San Luis Obispo
General Hospital, Santa Maria
Glendale Community Hospital
Golden State Hospital
Good Samaritan Hospital
Harbor General Hospital
Hollywood Hospital
Huntington Memorial Hospital
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Kabit-Kaiser Institute
Las Campanas Hospital
Lincoln Hospital
Lompoc Community Hospital
Long Beach Naval Hospital
Los Alamitos Sanitarium
Los Angeles Sanitarium
Maywood Hospital
Methodist Hospital

Mission Hospital
Monrovia Hospital
Norwalk State Hospital
Ontario Memorial Hospital
Orange County Hospital
Our Lady of Perpetual Help
Park View Hospital
Paso Robles War Memorial Hospital
Physicians and Surgeons Hospital
Pomona Valley Community Hospital
Porterville State Hospital
Pottengers Sanitarium
Queen of Angels Hospital
St. Francis Hospital, Lynwood
St. Francis Hospital, Santa Barbara
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St. John's Hospital, Santa Monica
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St. Luke's Hospital
St. Vincent's Hospital
San Antonio Hospital



Cooking

87

HOSPITALS

OBTAIN THESE IMPORTANT BENEFITS

FROM THE USE OF GAS

- Savings in operation
- Savings in maintenance
- Savings in equipment investment
- Cleanliness with minimum effort
- Automatic Operation for cooking perfection
- Safety-Approved by National Board of Fire Underwriters

These and other advantages of GAS and Gas Cooking Equipment have been cited time-after-time by experienced hospital management executives.

The case for GAS is well-known to dieticians, food service directors, and hospital purchasing authorities in Southern California as is evident in the use of GAS for cooking in 95% of the hospitals in Los Angeles and Southern California. For new installations as well as for modernizing, these institutions depend on modern Gas Cooking Appliances which incorporate such features as:—

- stainless steel exteriors
- automatic burner lighting
- fat-saving fryers with instant heat response
- individual thermostatic control of baking and roasting ovens
- range-top temperatures up to 1100° F.
- ceramic flame-broilers which produce golden brown or char finish

San Gabriel Valley Hospital
San Pedro Community Hospital
Santa Ana Community Hospital
Santa Barbara County General Hospital
Santa Clara Valley Hospital
Sawtelle Hospital
Scott's Fair Oaks Convalescent Home
South Hoover Hospital
State Department of Correction Hospital
Shrine Hospital for Crippled Children
Temple Hospital
Terminal Island Navy Hospital
Torrance Hospital
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U.S. Naval Hospital
Ventura County Hospital
Wadsworth General Hospital
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White Memorial Hospital
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Women's Hospital

GAS and Modern Gas Equipment make volume food preparation and service so easy and economical that everyone responsible for managing and operating a hospital or other institution will find it worthwhile to make an up-to-date study of kitchen equipment economics. The Gas Company Representative and your Food Service Equipment Dealer will help with analyses and estimates.



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the
dishwasher
that saves
you money!
Kewanee
dishwasher



Does a *better*, more sanitary dishwashing job with *less* help . . . less water . . . less detergent . . . less breakage! Many users save enough in just a few weeks to write off its modest cost. After that, it continues to pile up savings for you!

WHAT KEWANEE DISHWASHER DOES:

Washes up to 3000 dishes per hour. Dishes (including silver, glasses, bowls, pots and pans) are placed in basket and put in washing compartment. Turbulent action (water driven at rate of 400 gal. per min.) thoroughly cleans dishes . . . utilizes every particle of washing compound. Pump recirculates water. Basket then dipped in 180° rinse water (Dishwasher heats own water — no booster needed). Dishes dry without toweling. *Send Coupon Today for Full Information!*

KEWANEE DISHWASHER
802 Burlington Ave., Kewanee, Illinois

Gentlemen:

Without obligation, send me information on Kewanee Dishwashers.

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NEWS IN REVIEW

Evansville Produces Guide to Local Industrial Jobs

EVANSVILLE, IND. — The high school students of this Ohio River city should have an unusually clear view of the vocational opportunities open to them. An illustrated 190 page book, entitled "Your Career Opportunities in Evansville Industry," has recently been released to the students.

The result of a six-month project involving at least 30 employees, this book is the outcome of joint efforts of the Evansville public school system and the Evansville Manufacturers and Employers Association. Included are a dictionary of occupational titles and an index of job opportunities in Evansville industry and a separate chapter on each of several major types of occupations.

An important part of the compilation of information involved interviews with 30 pilot plants and a listing of the job analyses in each of them. A questionnaire was then distributed to 200 industrial plants. The managers were requested to analyze these descriptions and to report local variations in the way the

job is performed. This information is included in the book in detailed form.

Closed Circuit TV Used for High School Career Conference

NEW YORK.—The first attempt here to employ closed-circuit TV for educational purposes was believed to have taken place March 21 when more than 3500 junior and senior high school students sat in three widely separated movie theaters and "attended" the first Greater New York Scientific and Engineering Conference.

The program, which lasted for one hour, cost \$10,000. It was designed to attract students to careers in science and engineering. The program was arranged by the Technical Societies Council of New York, Inc., an affiliation of engineering and chemical societies. Cooperating were New York University, the board of education, and the public service committee of the theater-television industry.

The students were shown the latest development in prefabricated housing

(Continued on Page 116)



The program of the first Greater New York Scientific and Engineering Conference originated from the American Broadcasting Company's studio and consisted of demonstrations and talks by leading scientists from the companies which took part in the actual telecast. Each lecturer featured some phase of science and engineering and pointed out the many opportunities that await the nation's future scientists. Before the cameras, Joseph Stewart of an oil corporation's development company performs a demonstration which was designed to illustrate the rapid growth of the petrochemical industry since its beginning.

*We'd get more work
with **LESS NOISE!***

*You'd get less noise
with **FIBRETONE***
Acoustical Ceilings!*

Johns-Manville Fibretone Acoustical Ceilings reduce disturbing noise . . . readily installed, they provide the quiet comfort so necessary for better, more efficient work.



Fibretone Panels
are easily installed over new or existing construction.

BECAUSE DISTRACTING NOISE can lead to confusion and careless mistakes in schoolwork, practically all new schools include acoustical ceilings for noise absorption. However, even if your school was constructed before sound control became an established science, you can have Johns-Manville Fibretone Acoustical Panels easily and quickly installed over your present ceilings with little interruption to regular routine.

Johns-Manville FIBRETONE offers an acoustical ceiling which is highly efficient and modest in cost. It consists of 12" square panels of sound-absorbing materials in which hundreds of small holes have been drilled. These

holes act as "noise-traps" where sound energy is dissipated. Fibretone is pre-decorated, can be painted and repainted, and is available with a flame-resistant finish.

Other J-M Acoustical Ceilings include *Permaacoustic**, a textured noncombustible tile with great architectural appeal; *Transite**, panels made of fireproof asbestos; and *Sanacoustic**, perforated metal panels backed with a noncombustible, sound-absorbing element.

For a complete survey by a J-M acoustical expert, or for a free book entitled "Sound Control," write Johns-Manville, Box 158, Dept. NS, New York 16, N. Y. In Canada, write 199 Bay Street, Toronto 1, Ontario.

*Reg. U. S. Pat. Off.



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Movable Walls—Terraflex* and Asphalt Tile Floors—Corrugated Transite*—Flexstone* Built-Up Roofs—Etc.

NEWS...

ONE WAY TO DO IT



The daily income from this oil well on school land in Nebraska will pay the daily school costs for about 27 students. The first well on state owned land in Nebraska, this Kimball County well was recently discovered. The well is reported capable of producing a thousand barrels a day, but at present this and other wells in the county are restricted to 110 barrels a day. Here local citizens and school children inspect the pumping unit.

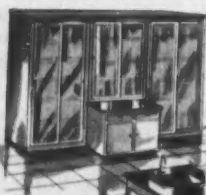
"TEST" FOR SCHOOL BOARDS:

- ✓ What will your enrollment be in 1962?
- ✓ What about space for biology, physics, chemistry?
- ✓ Must specialized lab equipment be custom-made?

*Metalab school equipment experts
will give you the MONEY-SAVING ANSWERS!*



Questions like these must be answered before you build a new lab. Find out today how Metalab gives you all the right answers plus lower initial costs and easier maintenance. See the complete line of Metalab's exclusive sectional lab units... the same quality equipment used by America's leading industrial firms.



A request on your letterhead will bring you this free 180-page catalog and manual—write today!



*Metalab
engineers in
principal cities will
assist with plans
and estimates.
No obligation.*

SECTIONAL LABORATORY FURNITURE AND EQUIPMENT BY
METALAB Equipment Corp.

236 DUFFY AVE., HICKSVILLE, L. I., N. Y.

(Continued From Page 114)

and how to kill a microbe. They also heard short talks on atomic, electrical and aeronautical engineering and allied subjects.

A two-way audio hook-up between the American Broadcasting Company and two of the theaters allowed students to question a three-man panel, consisting of Dr. Clarke Williams, nuclear physicist of the Brookhaven National Laboratory, Long Island; Dr. Charles Selzer, superintendent at Dumont, N.J., and John Kotrady, an assistant in the technical research division of the Texas Company.

About 1100 students continued the conference in the afternoon and participated in 17 workshop and discussion groups. In these sessions they posed questions to 45 professionals in engineering and scientific fields.

Universities Release Report On Academic Freedom

NEW YORK.—Free enterprise is as essential to intellectual as to economic progress, states a report on the freedom of American universities made public recently by the Association of American Universities through its president, Harold W. Dodds, also president of Princeton University.

"The Rights and Responsibilities of Universities and Their Faculties," the product of six months' work, was written by a committee headed by A. Whitney Griswold, president of Yale University.

Individual scholars, the report said, "are united in loyalty to the ideal of learning, to the moral code, to the country, and to its form of government," but they represent diversified fields of knowledge and express many points of view. To command "uniformity of outlook upon a university faculty would put a stop to learning at the source. To censor individual faculty members would put a stop to learning at its outlet."

The committee stated that a person's only limitations in teaching are "the requirements of citizenship, of professional competence and good taste." Within these limitations, a teacher is "entitled to all the protection the full resources of the university can provide."

Although the report admits that such protection will invite criticism from the public, it states that the universities must face up to such criticism. To do otherwise "would invite the fate of the

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in your laboratory.**

and the benefit of this

NEW freezer

teaching kit

you can give

your students

real freezer training



The home freezer is playing an increasingly important part in American homemaking. Last year, more than 1,000,000 freezers were installed. More and more students are requesting that freezing instruction be included in the home economics courses.

To help in the teaching of this subject, we offer the new Freezer Teaching Kit, described below. It is timely and helpful. It provides a means of visual instruction. It

helps the teacher make full use of the freezer itself. Of course, a freezer in the laboratory is a "must," because . . .

YOU NEED A FREEZER TO TEACH FOOD FREEZING!

If your school doesn't have a modern home freezer, your local electric light and power company, or electric appliance dealer will tell you how easy it is to have one in your laboratory.

NEWEST WAY TO TEACH FOOD FREEZING! The Freezer Teaching Kit makes it easy to provide effective freezer instruction. Includes 12 beautiful, full-color wall charts, and Home Freezer Teaching Guide. Absolutely FREE! Simply use coupon!

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Please check: School has . . . does not have . . . Electric Home Freezer in laboratory.

Please send, absolutely FREE, the new Freezer Teaching Kit to:

Your name and title

Name of school

Address of school

NEWS...

German and Italian universities under fascism and the Russian universities under communism."

Concerning the present investigations the committee said it is the duty of the scholar, "as a citizen, to speak out," and added that this duty is underlined for the professor.

The report stated: "In this respect, invocation of the Fifth Amendment places upon a professor a heavy burden of proof of his fitness to hold a teaching position and lays upon his university an obligation to reexamine his

qualifications for membership in its society."

Although professors are told that "it is clearly the duty of the universities and their members to cooperate in official inquiries," the report states that it does not necessarily approve of the ways in which these investigations are carried out. But, "when the powers of legislative inquiry are abused, the remedy does not lie in noncooperation or defiance; it is to be sought through the normal channels of informed public opinion."

The report concludes, in part: "We assert that freedom of thought and speech is vital to the maintenance of the American system and is essential to the general welfare. Condemnation of communism and its protagonists is not to be interpreted as readiness to curb social, political or economic investigation and research. To insist upon complete conformity to current beliefs and practices would do infinite harm to the principle of freedom, which is the greatest, the central, American doctrine."

Gov. Dewey Asks F.C.C. to Extend TV Deadline

ALBANY, N.Y.—To permit consideration of "every possible sound action" to establish educational television in New York State, Gov. Thomas E. Dewey recently urged the Federal Communications Commission to extend the deadline for allocation of all education TV channels.

The governor declared there had been too much emphasis on "letting the government do it," and that this emphasis has resulted in too little incentive to private organizations "to make use of this great new medium to bring to the people the fruits of our educational and cultural advances."

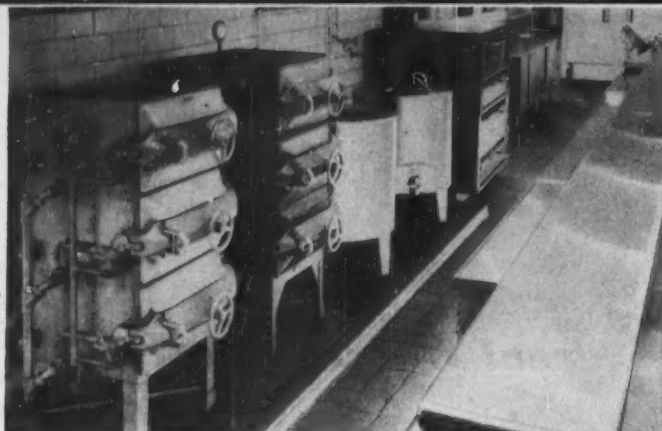
He proposed a program under which the state would assist local educational and cultural groups to take advantage of television. His program implements recommendations made by the Temporary State Commission on the Use of Educational Television in rejecting a proposal by the board of regents that the state build and operate 10 educational television stations. The commission recommended the construction and operation of noncommercial stations by private groups and the encouragement of educational groups to take "full advantage of the opportunity to supply television material in the educational and cultural fields."

N.Y.U. Expands Program of Administrative Internship

NEW YORK. — New York University has sent to about a hundred school systems an invitation to participate in its program of internship for school administrators. Schools are encouraged to share in the selection of an intern and to cooperate with the university in his guidance and supervision, said F. C. Borgeson, program chairman.

In the descriptive brochure covering the purposes of the program, administrators are reminded: "The task of

12 YEAR OLD STEAM-CHEF *helps Gimbel's win a prize!*



This new kitchen at Gimbel Brothers, Milwaukee branch of the famous New York Department Store, won a prize in the Institutions contest last year, competing against the finest in the country. Standing side by side are two STEAM-CHEFS—one slightly over a year old, and the other purchased in June 1940.

Performance of the old STEAM-CHEF encouraged them to buy a new one; they put the two side by side in their new kitchen; and that kitchen won a prize from outside impartial judges, who chose it as one of the best modern kitchens of 1952.

Durability of STEAM-CHEF steamers makes their purchase a long-term investment. Some STEAM-CHEFS have been in daily use for 20 years or more. You may have occasion to buy only one in a lifetime, but you want that one to be the best, which is the cheapest in the long run. You can take advantage of the experience of Gimbel's and other leading firms throughout the country and choose STEAM-CHEF for heavy duty—"Steamcraft" for smaller kitchens. Available for direct steam, gas or electric operation. Ask your kitchen equipment supplier, or write us for details.

Write for free booklet

"FOR BETTER STEAMING"

**THE CLEVELAND
RANGE COMPANY**

"The Steamer People"

3333 Lakeside Ave., Cleveland 14, Ohio

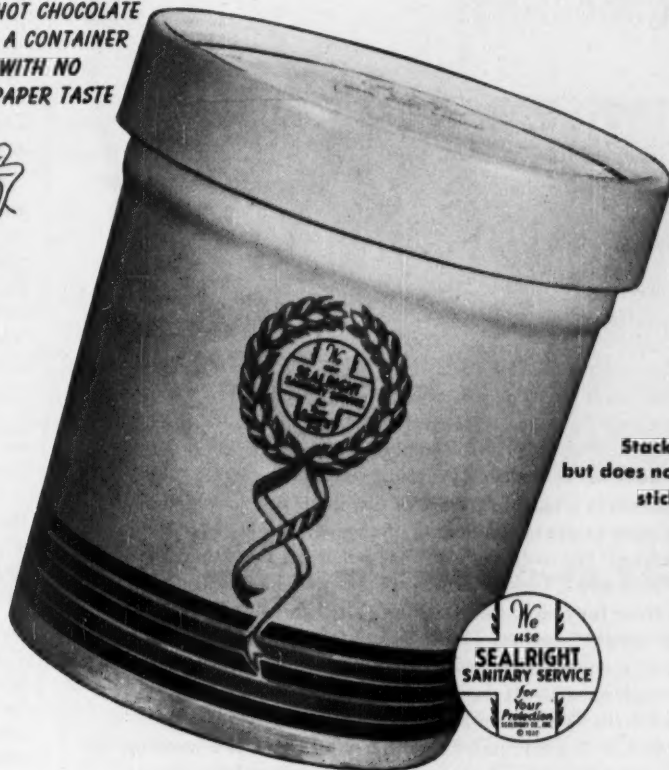


A great new idea in paper service

An all-purpose container that's plastic coated!



AT LAST!
HOT CHOCOLATE
IN A CONTAINER
WITH NO
PAPER TASTE



Stacks
but does not
stick



Schools which have already *discovered* this plastic coated paper container say the Alservis is "a natural" for cafeterias and lunchrooms.

Think of it! You can both heat and serve food right in the same container and, when it's empty, it's easily disposable. The Alservis saves time, money and, of course, eliminates both dish inventory and dishwashing.

Here's a container that you can use for all manner of hot prepared foods, including those with gravies, greases and sauces.

Its plastic coating not only provides a porcelain-like rim to drink from, but also enables it to hold all the true flavor of cocoa, soups and other hot liquids without wilting or dripping.

Sealright ALSERVIS NESTYLE

The Plastic Coated
Paper Container with
the Porcelain-like
finish

SEALRIGHT CO., INC., FULTON, N. Y.
I would like samples and full information about Sealright's
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Oswego Falls Corp.—Sealright Co., Inc., Fulton, N. Y., Kansas City,
Kansas—Sealright Pacific Ltd., Los Angeles, California—Canadian
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At Last!

For Emergency Classroom Use Conferences... Lectures Staff Meetings

A TABLET ARM CHAIR

THAT FOLDS!

The Greatest Advance
in the History of Folding Chairs

Undoubtedly, you've wished for a chair like this many times. Now it's here—perfected—ready to go to work for you. Here is permanent convenience and comfort adapted for emergency use—the greatest advance in the history of folding chairs.

The tablet arm is a built-in feature of the chair, not an attachment. It is strong, easy to operate, a marvel of engineering ingenuity (patent pending). For ordinary chair use when the arm is not needed, it folds down, out of the way, beside the chair, and flat against the chair for quick, safe stacking. The flat, folded depth of the chair is only 3 inches. The chair can be folded or unfolded in a matter of seconds. It is exceptionally easy to get into and out of.

Built throughout with all the famous Clarin insistence on utmost quality, the Clarin Tablet Arm Folding Chair will give years of faithful service. It is a supremely strong X-type chair, self-leveling, welded to insure exceptional strength and quietness. Its cushioned rubber feet, a Clarin exclusive, can't mar the finest floor. It comes with Clarin's famous reinforced seat of 5-ply plywood, or it can be had with fine quality leatherette on seat and back, or on seat alone. Available in wide range of frame and upholstery colors.

Clarin Mfg. Co., Dept. 14, 4640 W. Harrison St., Chicago, Ill.

Clarin

Write today on your institution's letterhead for beautiful, new FREE Catalog of the complete Clarin line.

The Only Complete Line of Steel Folding Chairs



No matter what your need, there is a Clarin Steel Folding Chair to meet it. Every chair represents the utmost in quality. It is stronger, safer, more comfortable—scientifically engineered in every detail to justify the only written 10-year guarantee in the industry.

Clarin Steel Folding Chairs for Children

Clarin's extensive line provides even for juveniles. Children love these colorful, sturdy, comfortable chairs made just for them. Hard to tip over, easy to set up, simple to fold... true Clarin quality on a smaller scale. Two sizes—up to 7 and up to 9 years.



SINCE 1925... THE ARISTOCRAT OF FOLDING CHAIRS

NEWS...

locating and training educational leaders is not only difficult but is indeed extremely important. Better programs in preparing educational leaders will result when universities and school systems cooperate in the enterprise."

Three-way planning on the part of the local administrative officer, New York University, and the intern is expected for this program. School administrators, in planning for participation, are expected to specify the major duties which the intern will assume and to clarify in advance the most pressing current problems faced by the local administration.

Creole Child Denied White School in Alabama

MONTGOMERY, ALA.—Because of testimony proving that the word "Creole," in Mobile, Ala., is applied to a mixed race in which Negro blood is present, the Alabama supreme court held March 27 that a 7 year old boy of "Creole" descent could not attend a white school in Mobile.

In other parts of the state the word is generally applied only to early Louisiana settlers of pure French or Spanish descent.

Earlier, the lower court had refused the request of Michael S. Chestang for a writ of mandamus to force Mobile's board of education to readmit his son, Michael Jr., to an elementary school for white children.

At that time Mr. Chestang had testified he had attended white churches and had associated intimately with white persons all his life but his son had been dismissed from school because of protests by other parents.

President Orders Review of Grants-in-Aid to States

WASHINGTON, D.C. — President Eisenhower asked Congress to set up a commission to study federal grants-in-aid programs to states. Some \$2,000,000,000 a year, the greater part of which goes for social security, health and education, is involved.

Among the grants-in-aid the federal government has been making are those for land-grant colleges, vocational education, and research.

The President wants this commission to study also all federal-state-local relationships, especially those involving taxing powers. The President has in mind the fact that many tax sources are exploited by both states and the federal



Darien Junior High School, Darien, Connecticut

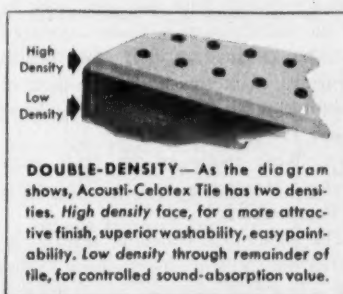
"HEARING AID" for hard-to-hear-in rooms

Acoustical environment is an important factor in the progress of pupils. In classrooms where unchecked noise and poor acoustics impede distinct hearing, children must strain to hear. Thus, tension and fatigue increase. Attention slackens. Discipline tends to deteriorate. Effective concentration is vastly more difficult.

Low-Cost Answer

The solution to the problem of hard-to-hear-in rooms? Schools by the hundreds have found it in economical Acousti-Celotex Sound Conditioning! A sound-absorbing ceiling of Acousti-Celotex Tile improves faulty acoustics, makes distinct hearing easier in classrooms,

auditoriums, music rooms. In addition, it checks noise and brings *quiet comfort* to libraries, study halls, band rooms, gyms, cafeterias, corridors.



Easy Maintenance

Acousti-Celotex Tile is quickly installed, requires no special maintenance. Its unique *double-density* feature (see diagram) provides excellent sound-absorption value plus a surface of remarkable beauty and washability. Can be washed *repeatedly* and painted *repeatedly* with no loss of sound-absorbing efficiency.

MAIL COUPON TODAY for a Sound Conditioning Survey Chart that will bring you a *free analysis* of the noise and acoustical problems in your school, plus a factual free booklet, "Sound Conditioning for Schools and Colleges." No obligation.



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Yes, the Fairbanks-Morse Health Scale is back again, and with the same true accuracy and dependability to serve you over the years. This new model, No. 1265, is noted for its easy-to-use features and its smart, neat appearance. And the special attention given to the design and durability of the wearing parts assures its long life and trouble-free performance. Fairbanks, Morse & Co., Chicago 5, Illinois.



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NEWS...

government. Today there is even a triplication of taxation in the matter of incomes since many cities are now resorting to income taxes to meet their expenditures.

The President told Congress:

"The present division of activities between federal and state governments, including their local subdivisions, is a product of more than a century and a half of piecemeal and often haphazard growth. This growth in recent decades has proceeded at a speed defying order and efficiency. One program after another has been launched to meet emergencies and expanding public needs.

"Time has rarely been taken for thoughtful attention to the effects of these actions on the basic structure of our federal-state system of government. Now there is need to review and assess, with prudence and foresight, the proper rôles of the federal, state and local governments."

Congress is expected to set up the commission without delay. But meanwhile all legislation dealing with grants-in-aid for education will be held in abeyance. The proposed commission is not expected to report its findings until late in 1954.

Columbia President Condemns Demagogue Investigations

RIO PIEDRAS, PUERTO RICO.—American universities have the right to demand that congressional investigations of institutions of higher education "be conducted as sober, fact-searching activities and not as tub-thumping devices for demagogues who may seek to use an indiscriminate smear campaign in order to further their own selfish ambitions," Grayson Kirk, president of Columbia University, asserted here March 12.

Dr. Kirk spoke at the 50th anniversary celebration of the University of Puerto Rico.

The Columbia educator readily accepted the right of investigating bodies to conduct such inquiries but urged that the position of the universities "should be that their record is a proud one, of devoted service to God, to country, and to humanity, and that they are quite prepared to accept any public accounting, provided it is conducted in an objective and reasonable fashion."

Faculty members called before such committees, Dr. Kirk stated, should be encouraged to speak freely and not "seek cover behind the Fifth Amend-

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Up to 5 times stronger than ordinary plastics, Kys-ite tough to chip or crack... stacking, carrying and washing can be done at top speed without any danger. Lightweight, quiet, eliminating all noisy clatter. Washes easily—manually or in machine, safe in boiling water. Stain-resistant tableware in maple color; red or brown trays.

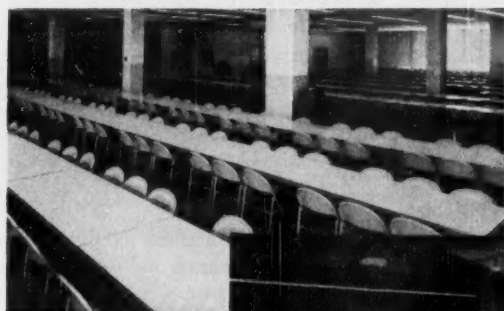


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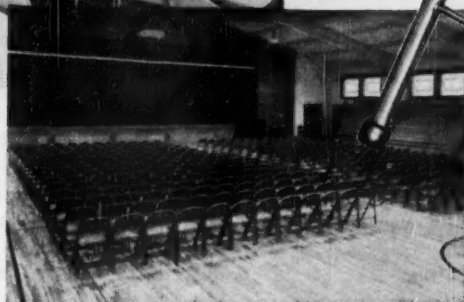
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. . . work best, look best, last longest in gymnasiums,
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Backed by 67 years of public-seating leadership! Tested by one of industry's finest laboratories! Proved by more than 8 million chairs in thousands of installations—many dating back for years! There's just no "wear out" to American Seating's reinforced triangular-steel-tubing frames, with steel cross braces from outside to outside of legs, and over-all rugged, durable design.

There's extra comfort in these wider, deeper body-shaped seats and wider, deeper, shoulder-fitting formed back panels. Educational authorities like the freedom from any sliding or binding parts, the absence of all snagging, cutting, or soiling hazards. Light in weight, American folders are easy to carry and store, fold easily, quietly, compactly, and can't tip forward in use. Write Dept. 5.

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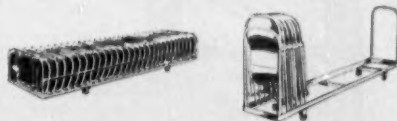
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Manufacturers of School, Auditorium, Theatre, Church, Transportation, Stadium Seating, and Folding Chairs.

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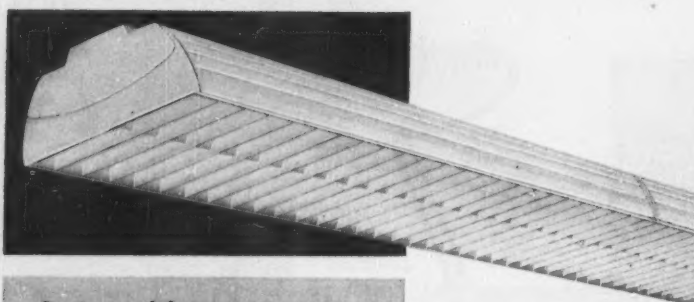
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Two styles above for general or under-stage use. Permit easy, convenient storage. Swivel casters—removable handles, ample capacity. Other styles available.

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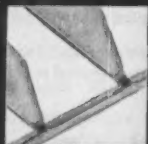


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Extremely strong, rigid one-piece steel louver assembly



Simplified installation—clamp hanger grips channel

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NEWS...

ment, even though they have technically a perfect right to do so." He declared that "a professor, like his university, bears some burden of public responsibility and his refusal to speak out will reflect adversely on both himself and his institution."

He cautioned, however, against summary dismissal of faculty members who invoke this constitutional privilege. He urged instead a careful examination by the university, "giving him the opportunity to establish his right to continue to enjoy his university association."

Educational TV Station Opens in Houston

HOUSTON, TEX. — To train students to take over jobs in the TV field and to bring the classroom into the home are the dual aims of station KUHT, a noncommercial educational television station which went on the air here April 16 over Channel 8.

The station is licensed jointly by the University of Houston and the Houston public school system.

"By televising lectures, large classes could well become a thing of the past," stated Dr. W. W. Kemmerer, president of the university.

Professors at the university are finding themselves plunged into something new, too. This summer, 12 members of the faculty will attend a six-week course to learn how to "teach over TV."

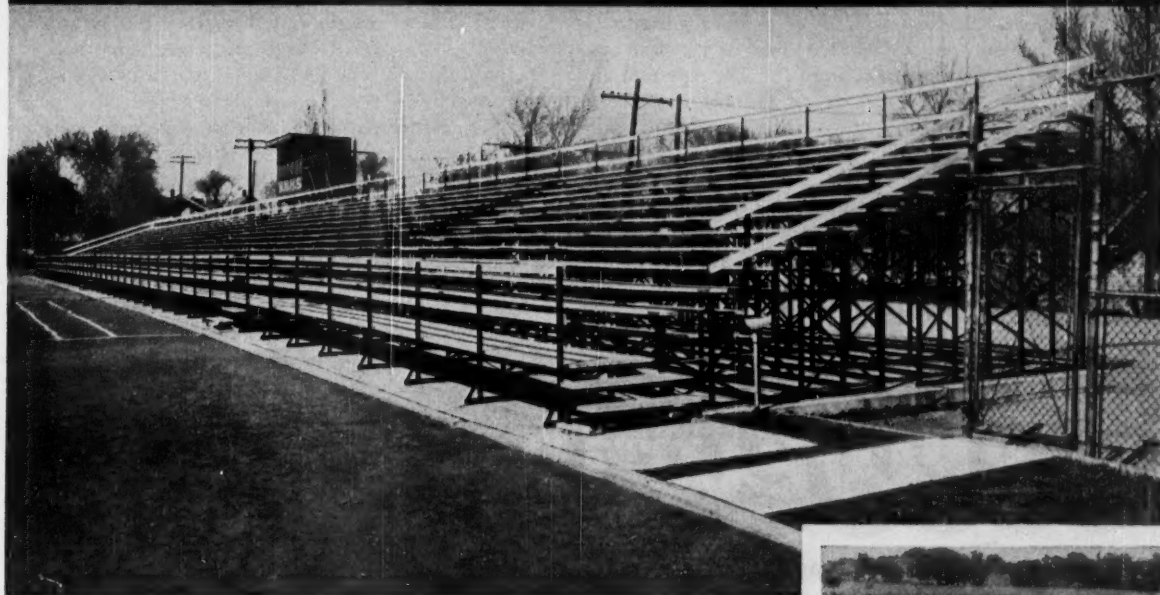
KUHT will not be limited to lecture programs entirely; newscasts and light entertainment are also on the schedule. The staff believes that it can experiment in new phases of programming which "commercial stations would find difficult for evident economic reasons," thereby adding valuable information to the TV field.

Urges Vocational Schools to Give Attention to Older People

WASHINGTON, D.C. — Public vocational schools should give attention to the needs of the older and retired worker, says Lawrence Borosage, newly appointed head of the federal division of trade and industrial education. Dr. Borosage, a 40 year old University of Michigan educator, succeeded Walter Cooper, who had been given other duties in the vocational education branch of the Office of Education.

The older worker, in many instances, needs retraining and readjustment to new conditions, Dr. Borosage believes. The retired worker needs hobbies and

For Safe, Trouble-Free Outdoor Seating

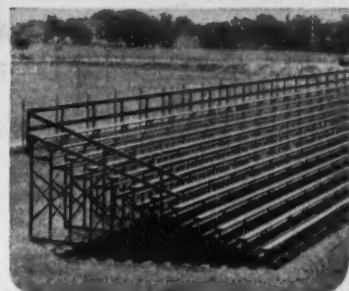


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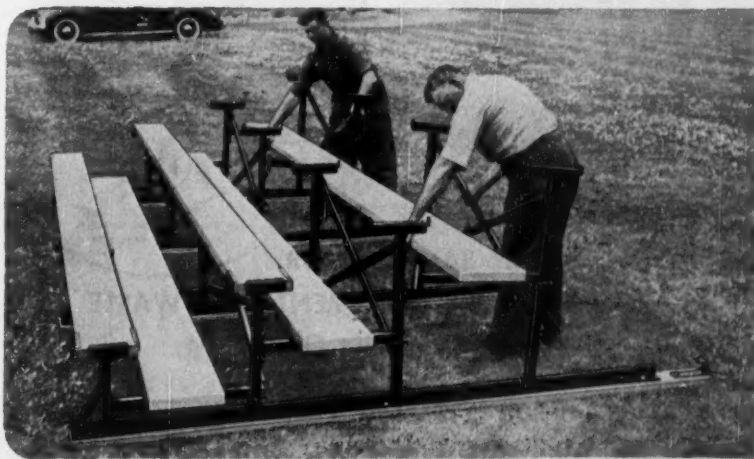
Viewed from every important angle . . . safety, structural strength, simplicity of assembly, comfort, long life, selectivity of sizes . . . these grandstands (built to hold more than 4 times the rated live weight load) always meet and usually surpass the most rigid requirements. Erected on concrete slabs or foundations, they make truly permanent installations. Mounted on 2" x 6" ground sills, they are easily portable from one location to another . . . indoors or outdoors. Yes, Universal Steel Grandstands

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Elevated type (above) has 40" walkway across front. In the conventional type (inset), first row seats are 16" above ground level. Both types provide 18" leg room and 24" front to back per row.

TYPICAL SEATING PLANS (Many other sizes and group lengths available)				
PLAN	No. 1	No. 2	No. 3	No. 4
Length	90' 0"	138' 0"	198' 0"	234' 0"
Rows High	8	10	10	12
Capacity	520	1000	1430	2028



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No special tools are needed to erect Universal Portable Steel Grandstands. They are easily assembled and just as easily knocked down for moving from one location to another . . . indoors or outdoors.

NEWS...

other leisure-time activities. The public vocational schools are equipped to meet these needs but have been slow to tell the community about their readiness to undertake the tasks, Dr. Borosage states.

McGrath Warns That Teacher, Classroom Shortage Will Grow

WASHINGTON, D.C. — In the annual report of the U.S. Office of Education for the fiscal year ending June 30, 1952, published recently, Earl J. McGrath, as

commissioner of education, stated that the shortage of school buildings and teachers will grow worse instead of better in the next few years.

The report, originally transmitted last October to Oscar R. Ewing, then federal security administrator, said many communities haven't enough money to build enough schools for the ever-growing number of pupils.

"Some form of federal assistance is imperative if the children of the nation, regardless of where they live, are to

have the advantages even of the basic education which Americans have traditionally considered their birthright," the U.S. Office of Education report said.

In the last fiscal year, the Office issued permits and allotted controlled materials for \$1,878,000,000 worth of school construction. However, \$10,000,000,000 would be needed to provide adequate schools, gymnasiums and other auxiliary buildings for all the children presently enrolled.

Reporting completion of the national count of usable and obsolete buildings, Dr. McGrath states that the second phase of the survey now under way will determine the location, size, type and timing of school construction projects needed by 1960.

Urging a thorough nationwide survey of the teacher shortage, the commissioner said it should determine, state by state, such things as the extent of the shortage, the rates at which teachers left the profession for various reasons, where teachers come from, what their salaries were in the various types of communities and teaching positions, and why more young people were not entering the profession.

Florida Annual School Report Given State's Visitors

TALLAHASSEE, FLA. — "Florida Schools Look Ahead," the 1953 biennial report of Florida's state superintendent of public instruction, is currently being distributed through regular school channels at the "Welcome Stations" on main highways entering Florida to tourists and prospective new residents and by local chamber of commerce offices.

The report is in the style of a pictorial magazine; this format was first used two years ago and met with such immediate public acceptance that the material was revised and reissued.

This year, for the first time, answers to questions asked most frequently by parents and new residents are included.

Chicago Considers Hiring Retired Teachers

CHICAGO.—Herold C. Hunt, superintendent of Chicago schools, has recommended that the board of education here employ teachers between the ages of 65 and 68 on a year-to-year basis.

State permission for this move will first be necessary. Dr. Hunt's recommendation was made in the face of a need for 1200 new teachers in Chicago for the 1953-54 school year.

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SENSATIONAL NEW—"PUSH BUTTON" TREATMENT FOR DUST MOPS, CLOTHS, DESKS AND FURNITURE



- ★ ABSORBS DUST
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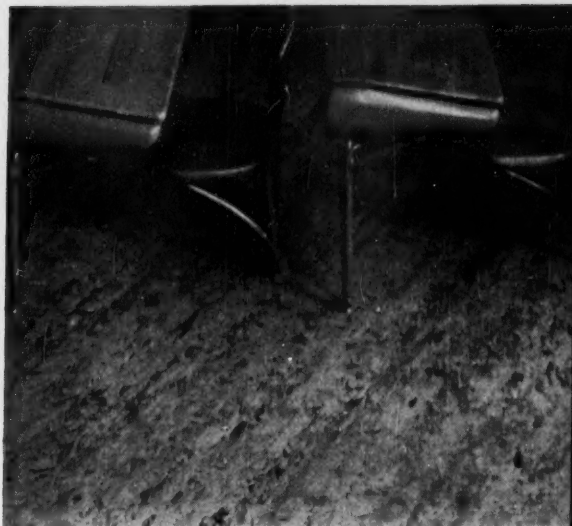
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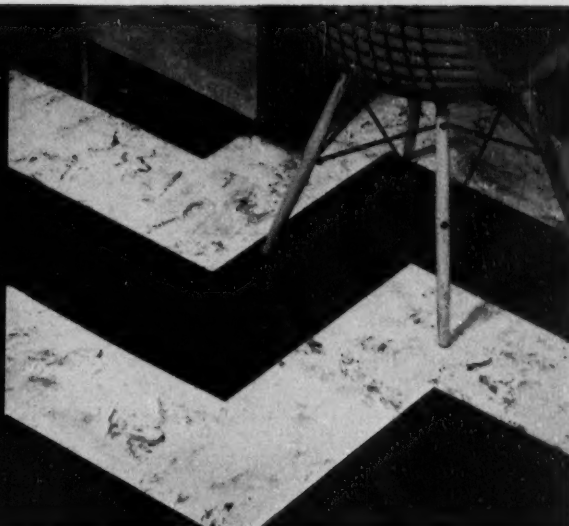
Some territories available to competent distributors.



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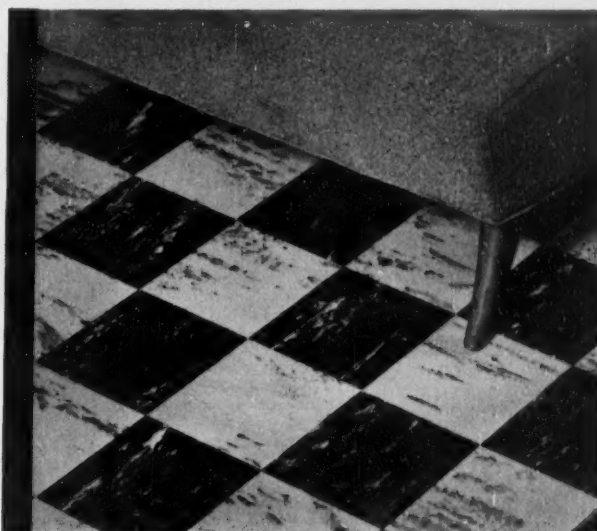
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Want to solve your school floor covering problem simply? Sensibly? *Economically*? Get the expert advice of the organization whose successful experience covers the *entire* field of resilient flooring . . . Congoleum-Nairn Inc.

Each one of the many types of Gold Seal Floors has been scientifically developed over the years to meet specific, *different* needs . . . manufactured to meet them squarely and *economically*. The famous Gold Seal money-back *guarantee of satisfaction* cov-

ers the entire line . . . serves as proof of their superlative quality. Three types of Gold Seal Floors are shown here.

No matter how tough *your* problem . . . how tight your budget . . . the best step you can take is to consult Congoleum-Nairn. Write the Customer Service Department for straight answers leading to the one right solution. Colorful, informative booklet available free.



GOLD SEAL FLOORS AND WALLS

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READER OPINION

(Continued From Page 10)

"Why is it, the superintendent wonders, when the community family suddenly shows signs of growing faster than expected, some persons, who help support the community family, immediately become irritated and upset over the cost of providing for these new arrivals? No one can blame people for wanting their money well spent and not wasted, but this is not the only problem. Waste cannot and should not be tolerated. What does bother the

superintendent is that in every community there seem to be those who assume an attitude that the superintendent and the school committee are up to some diabolical scheme to filch the coffers of the town treasury. What is the least we can do? is asked. If a near-by community has more, we are told we cannot expect to live up to the Joneses.

"Good schools are made up of three ingredients—good teachers, good materials of instruction, and good school-houses. The first two ingredients are often supplied willingly in good com-

munities. The third ingredient is obtained after much blood, sweat and tears. The requirements of a modern school are as different today as are the requirements of a modern home, a modern factory, or a modern car. The modern school supplies classrooms and group facilities where children can work and play together successfully; where attitudes of personal responsibility and good citizenship can be developed; where skills and understandings can be acquired. Visual aids, guidance services, physical education programs, group assemblies, are all relatively new devices designed to enrich and motivate the learning process. They are no longer characterized as new fangled or luxury items. Good schools throughout the country are using them all successfully.

"And so the superintendent continues his musing. How can a community be convinced that it should provide the most it can afford, rather than the least? How can it be convinced that the schoolhouse it builds today will in large measure determine the kind of educational program that can be offered in it for the next 50 years? How can it be convinced that facilities which require a makeshift educational program today will become totally inadequate 20 years from now? The last war taught us the meaning of "too little, too late." How can a nation of communities which spends many times as much money for liquor, tobacco, sweets and amusement as it does for education be convinced that it can afford to build complete, modern, well equipped schoolhouses? A superintendent sees all kinds of good and bad schools. He sees what can be done in good schools and what cannot be done in systems where schoolhouse facilities are inadequate. Citizens and taxpayers do not have time to investigate and see such conditions. Tell me, neighbor, how does one convince our friends that their children deserve the best we can afford and that, within reason, we can afford the best?"



Important ★
above all else in school lathes

★ SHELDON SAFETY

... all belts, pulleys, countershafts, gears and motors are completely enclosed. Speed changes and gear-ratio changes are made by external shift levers.

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... Timken "Zero-Precision" Tapered Roller Spindle Bearings (the absolute in accuracy) permit student work to ten-thousandths of an inch, and hold this accuracy without constant maintenance.

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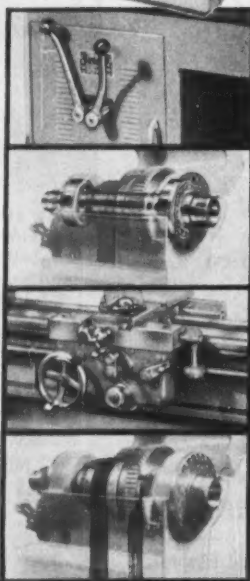
SHELDON-taught students are ready to operate standard industrial lathes—are familiar with standard controls and the "big lathe feel".

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The extra swing and greater collet capacity increase the range of possible student projects—from the "playing store" group to the practical. The extra power to the spindle, the speed range, weight and strength of SHELDON Precision Lathes permit heavy cuts, spinning and demonstration of correct use of new cast-alloy and carbide-tipped cutters.

Built by modern methods, with the finest machine-tool special machinery, on a continuous production line basis, these better lathes cost little more than ordinary school type lathes. Write for Catalog

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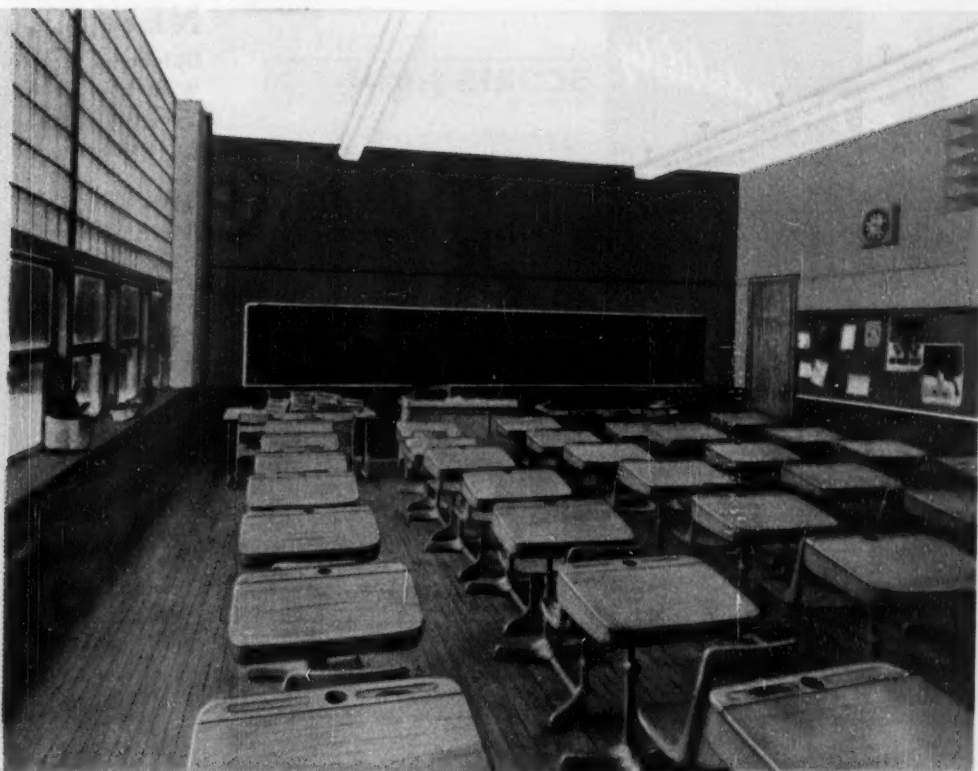


Cover Was Priceless

Sirs:

I want to congratulate you on the cover for the February 1953 issue of *The NATION'S SCHOOLS*. That cover was priceless and worth the price of the issue itself. I hope your artist will keep up the good work.—A. E. RUPP, superintendent, Cambridge, Ohio.

• Suggested color treatment of classroom, with chalk-board wall, brick wainscot, window sills and radiators in PBX Stratosphere Blue and remaining wall above wainscot in PBX Sand.



Pittsburgh COLOR DYNAMICS*

Puts Color To Work To Give You
These 5 Important Benefits

Reduced eye-strain
Better academic grades
Higher teaching efficiency ratings
Fewer housekeeping problems
Less vandalism

MODERN EDUCATORS would hardly recommend teaching from textbooks in use twenty-five years ago. Yet many supposedly up-to-date schools and colleges are painted in the same drab, monotonous colors that were commonly in use a quarter-century ago.

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● By such purposeful choice of color, you give schoolrooms colors in keeping with their uses, exposure to sunlight and available artificial lighting facilities. You reduce eye strain and stimulate concentration. As a result, academic grades and teaching efficiency are improved. The pride students take in their new surroundings reduces housekeeping problems

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● You can transform your school into a more attractive as well as efficient institution—easily, inexpensively. You'll find the complete story of COLOR DYNAMICS fully explained in a new book just prepared exclusively for the school field. It contains numerous suggestions for appropriate color arrangements of schoolrooms of all types.

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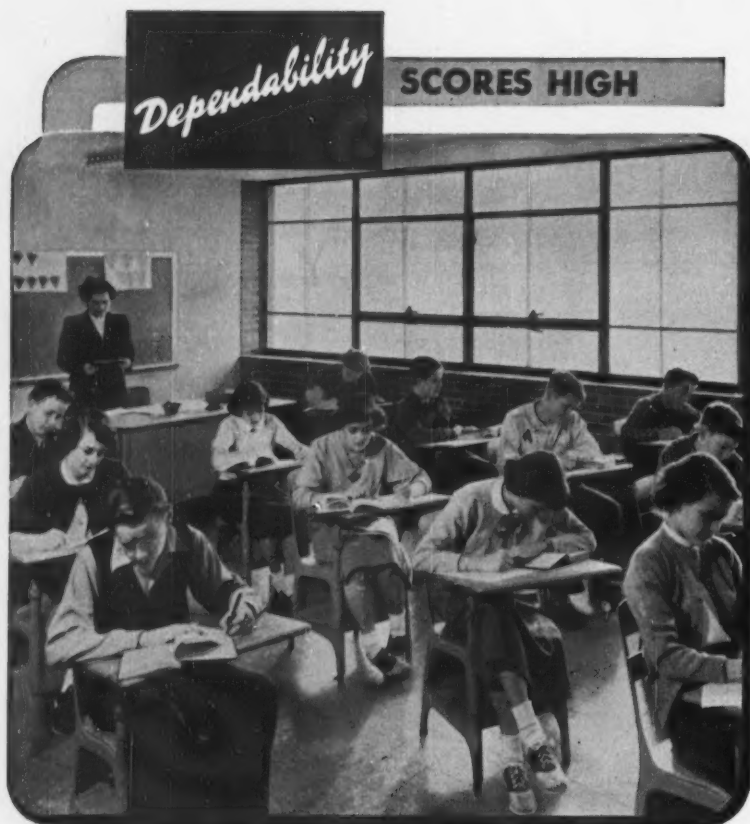
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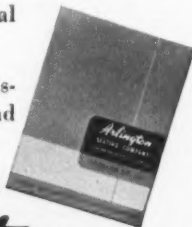


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In specifications to guide their equipment purchases, school administrators wisely include requirements that insure long service life and minimum maintenance.

Arlington's entire program is in accord with such requirements. With over a half a century of experience, Arlington today is synonymous with dependable seating for maximum service in rugged, every day classroom use . . . with design keyed to modern educational methods.

Completely illustrated Catalog No. 52 discusses both quality and design. You will find it helpful. Your inquiry is invited.



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NEWS...

Oklahoma A. & M. Threatened With Loss of Accreditation

STILLWATER, OKLA.—The North Central Association's executive committee "has postponed final action on the status of Oklahoma A. & M. pending receipt of documentary substantiation within 30 days that the institution is in conformity with the N.C.A. athletic program," announced Milo Bail, N.C.A. president, at the annual business meeting in Chicago.

The statement, which was made jointly by Mr. Bail, Norman Burns, secretary of the commission on colleges and universities, and Charles Boardman, N.C.A. secretary, also stated:

"The action amounts to a temporary cancellation of suspension. If documentary substantiation is not given within 30 days, the N.C.A. executive committee is empowered to disaccredit Oklahoma A. & M. without a vote of the entire association."

The last minute action to avoid the vote came after N.C.A. officials received a telegram from O. S. Wilham, Oklahoma A. & M. president, stating:

"After returning [to Stillwater, Okla.] I have conferred with the board of regents from Oklahoma A. & M. College. We will comply with all criteria governing intercollegiate athletics and expect to improve faculty salaries and competency. Immediate steps will be taken. Believe commission misunderstood our intentions."

The Aggies had been charged with allegedly emphasizing athletics "as a means of securing public support" and "lacking faculty control of athletic policy and subsidizing athletes."

Audio-Visual Criteria Proposed for Accreditation of Teachers

WASHINGTON, D.C.—Criteria used in the accreditation of teachers should recognize competent use of new audio-visual learning tools, according to the position taken by the Department of Audio-Visual Instruction of the N.E.A. at its national convention.

D.A.V.I., meeting in St. Louis, directed that immediate efforts be started to include suitable criteria for audio-visual instruction in the instruments used for accrediting secondary schools and teacher education institutions.

A national committee was also appointed to study ways of strengthening state audio-visual associations. Chairman of this group is William Gnaedinger of Washington State College.

ACOUSTICAL MATERIALS AT WORK

in the **DERBY HIGH SCHOOL**, Derby, Kansas



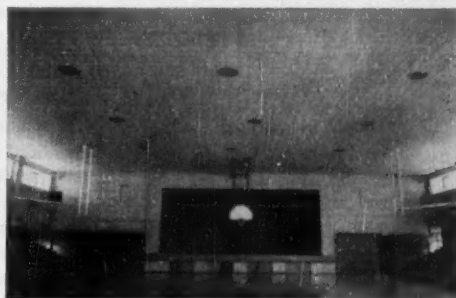
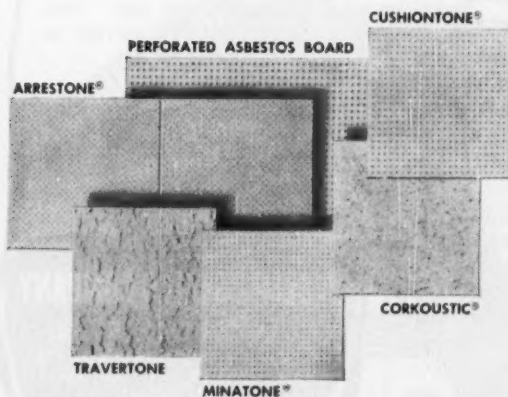
At work or play—Cushiontone muffles distracting noise

21,120 square feet of Armstrong's Cushiontone acoustical ceilings provide the Derby High School with efficient, low-cost sound conditioning.

Whether in one of the classrooms or at some function in the school's gymnasium-auditorium, everyone benefits from Cushiontone "quiet." In the music room, the walls as well as the ceiling are treated with Cushiontone to prevent annoying reverberation and distortion.

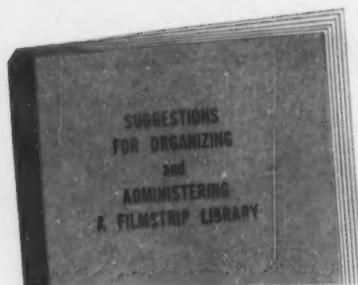
Armstrong's Cushiontone is a wood fiber material. Its 529 cleanly drilled perforations actually trap irritating noise. Low in both initial and installation costs, Cushiontone is also economical to maintain. Its white finish can be washed or repainted many times with no loss of acoustical efficiency.

Don't let high noise levels interfere with concentration in the classroom. Investigate Armstrong's Cushiontone. Your Armstrong Acoustical Contractor will be glad to give you free, expert advice with no obligation. For his name and for the free booklet, "How to Select an Acoustical Material," write Armstrong Cork Company, 4205 Wabank Avenue, Lancaster, Pennsylvania.



This Cushiontone ceiling cuts down excessive noise during gym classes, improves the acoustics when the room is used as an auditorium.

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NEWS...

New Jersey Court Upholds Bible Distribution Program

HACKENSACK, N.J.—The recent decision of a superior court judge in upholding as constitutional the distribution of Protestant Bibles in public schools marked the first court test of the Gideon Society's national school Bible distribution program.

Judge J. Wallace Leyden found no violation of the constitutional principle of separation of church and state in the distribution of the King James version of the Bible among public school pupils at Rutherford, N.J., although he said it is a "bad policy."

The suit was brought by Bernhard Tudor.

In his decision, Judge Leyden ruled: "I am unable to find where this proposed procedure by the board of education would violate any provision of the Constitution of the United States or the state constitutions. . . . There is nothing compulsory, nor is there any attempt to teach one religion over another. They [the Gideon Society] merely say to the parents, if you want a copy of this Bible for your child, you can have it by signing the request order.

"I can see no unconstitutional interference with the religious freedom of the plaintiff by what is proposed. Nor can I see any partisan favor granted to the Protestant faith by the distribution of these Bibles if they are requested.

"It may be well that it's a bad policy for the Rutherford Board of Education or any other board of education to do this. I personally think it's a bad policy, but I'm not concerned with a course of conduct that rests with the legislative or administrative discretion of the board of education."

Adult Education Association Receives Supplemental Grant

CHICAGO.—The Fund for Adult Education has made a grant of approximately \$92,000 to the Adult Education Association of the U.S.A., it was announced here recently by Paul H. Durrie, president.

About \$75,000 will be used for expanding the operations and research of the association's monthly publication, *Adult Leadership*. The publication was launched in May 1952 under an original fund grant of \$188,000 for two years.

The remaining \$17,000 of the new grant has been allotted for furthering

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TEACHERS, CUSTODIANS



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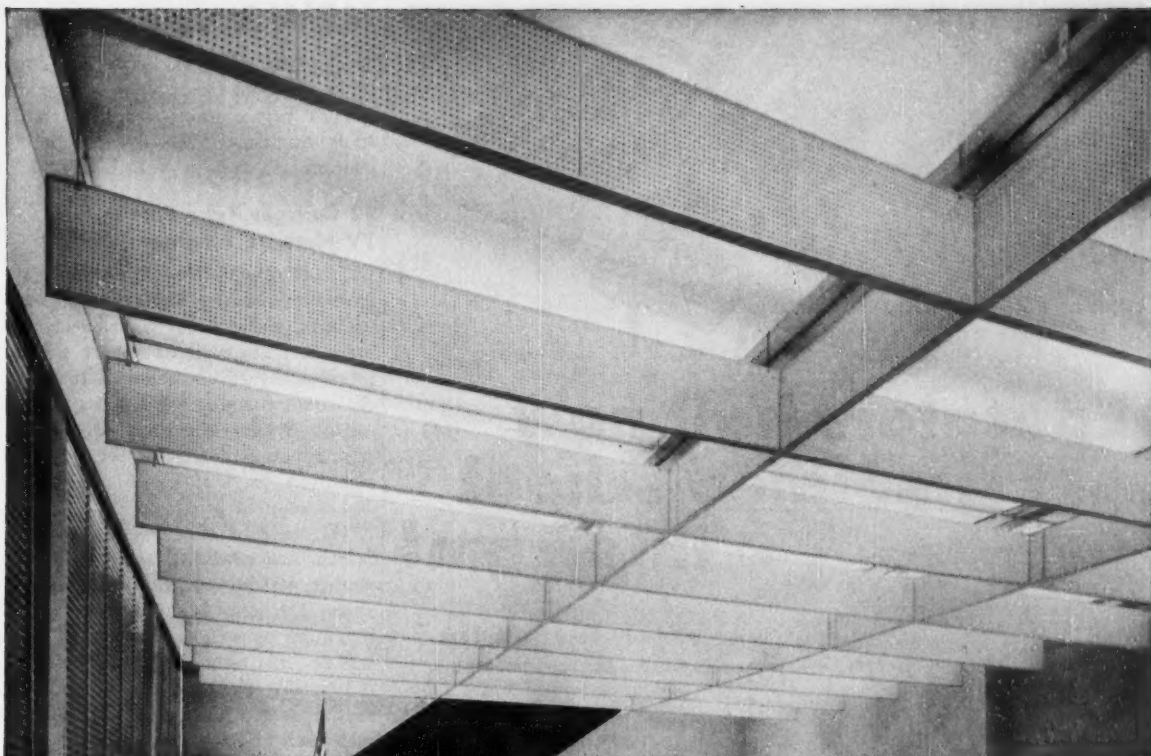
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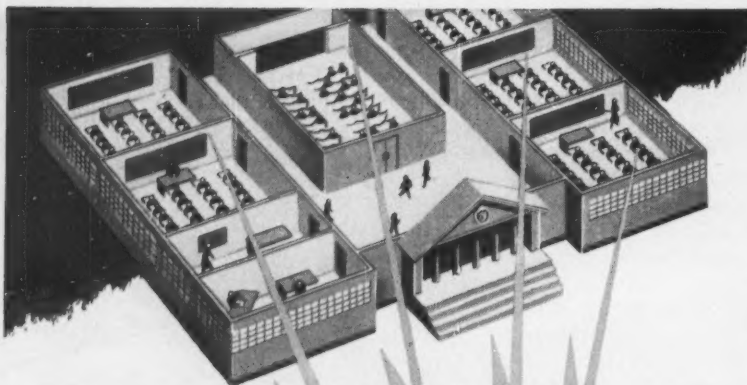
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NEWS...

development of the association's Council of National Organizations, a group of 125 organizations concerned with adult education. The council's headquarters are in New York City.

22 Colleges Take Part in TV Network Program

COLUMBUS, OHIO.—A new program series dramatizing higher education's scientific and cultural contributions to individual and national welfare will be presented by 22 universities throughout the country and the Columbia Broadcasting System television network, it was announced recently by Hubbell Robinson Jr., CBS-TV vice president and director of programs.

The weekly series, entitled "The Search" and scheduled to begin in September, will be produced at the universities. The series is "designed to be entertaining as well as educational" and will be "told from the point of view of individuals affected by, or participating in, the project," the network's announcement said.

Schools taking part are: Ohio State University; University of Pennsylvania; University of Michigan; University of Chicago; University of Minnesota; State University of Iowa; University of Louisville; University of North Carolina; Dartmouth College; State College of Agriculture and Engineering, Raleigh, N.C.; Massachusetts Institute of Technology; Cornell University; Columbia University; Brown University; University of California, Berkeley; University of Southern California; California Institute of Technology; Colorado School of Mines; University of Utah; Washington University; Northwestern University, and Pennsylvania State College.

Delaware Committee Recommends Closing of Negro College

DOVER, DEL. — The abolishment of Delaware State College, a state maintained school for Negro students, has been recommended by a committee appointed by Gov. J. Caleb Boggs.

In its report, the committee said the college has 79 students from Delaware and 31 from other states. The present cost to the state for each student is \$2600, which compares to an average cost of \$600 a student at the University of Delaware at Newark.

In urging the closing of the Negro college "in the interest of good education and for the advancement of Negroes in our community," the committee

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NEWS...

recommended that students now attending the school be permitted to enroll at the University of Delaware or other colleges under state subsidization.

Participation Up 5.8 per Cent in Federal Lunch Program

WASHINGTON, D.C.—A total of 9,900,000 children in almost 57,000 schools are participating in the National School Lunch Program during the 1952-53 school year, the U.S. Department of Agriculture reported recently on the

basis of preliminary reports from states, territories and the District of Columbia.

Participation so far this school year establishes a new record and is 5.8 per cent more than participation in the 1951-52 school year, which was the previous high.

The appropriation for the current year is \$83,400,000, of which \$67,113,000 is scheduled for apportionment to the states in cash. The balance is being used to purchase commodities that help meet specific nutritional requirements

for schools participating in the program.

Federal assistance during the 1951-52 school year averaged 4.4 cents per meal served, compared with 4.9 cents for the 1950-51 school year. Out of a total of 1,500,000,000 lunches served during the 1951-52 school year, almost 70 per cent were complete lunches, or Type A, compared with about 67 per cent for the year before.

In 1951-52 about \$250,000,000 was spent for food locally by participating schools under supervision of state departments of education. During the six months ended Dec. 31, 1952, the Department of Agriculture made available to the schools approximately \$37,000,000 worth of food. These foods consisted of commodities acquired under price support and surplus removal programs, and especially nutritious foods purchased for the school lunch program to supplement known deficiencies in the diet.

Secretary Benson Orders Economy in Lunch Program

WASHINGTON, D.C. — Secretary of Agriculture Ezra Taft Benson recommended to Congress that funds for the school lunch program be cut from \$83,000,000 to \$75,000,000 for the next fiscal year.

Some observers interpret this proposed cut to be an expression of Secretary Benson's personal uncertainty as to the value of school lunches in a free-enterprise society. Others, however, insist that the reduction is merely one of many ordered by the secretary to reduce the entire agriculture budget for 1954.

Meanwhile, the Department of Agriculture invited bids for the purchase of beef for distribution to schools. Three products are involved: frozen ground beef; frozen boneless chuck beef for roasts, and frozen boneless diced beef for stew. Distribution is scheduled to begin early in May.

Free Textbooks in Tennessee Approved by Legislature

NASHVILLE, TENN.—All school children in Tennessee will be guaranteed free textbooks as a result of legislation passed in the current session of the Tennessee legislature.

Fulfilling a campaign promise by newly elected Gov. Frank Clement, the bill requires that local school boards provide proof that each pupil has enough books. All state school funds



It's *not* the pretty wall and ceiling decorations that take the beating in your gym—it's the floor! That's why—if you want the most for your dollar—you'll be wise to budget for Robbins IRONBOUND* CONTINUOUS STRIP* gym flooring and let the wall and ceiling doo-dads fit the financing as they will.

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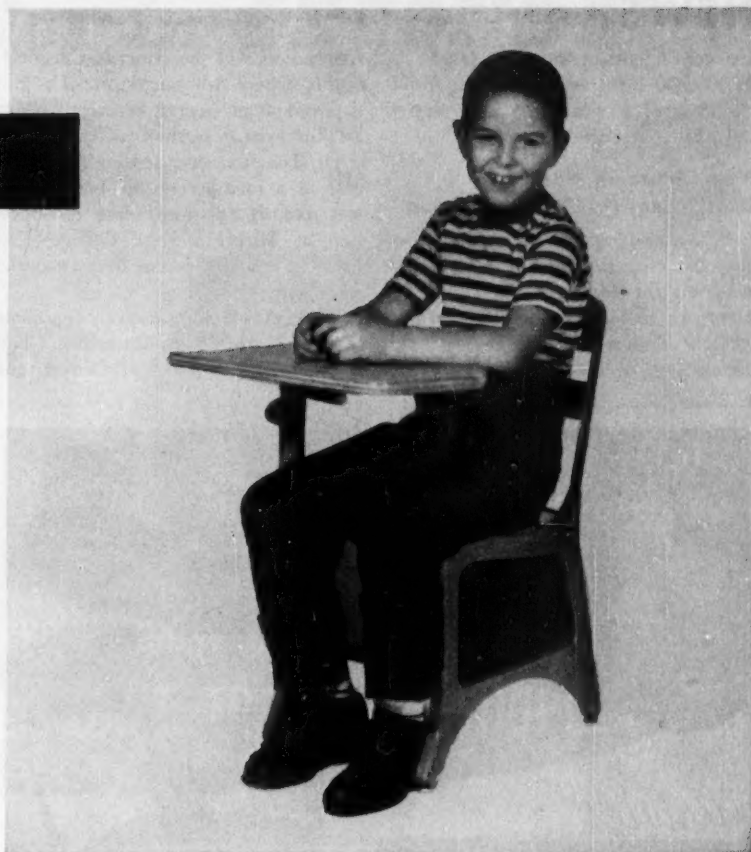
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Griggs Skyliner No. 500 Chair Desk

Griggs Skyliner chair desks are built to give maximum comfort to all students. These chair desks are proportionally-designed so that every student can read, write, and sit comfortably. They are made in three sizes, 13", 15", and 17" seat heights, and the desk top is easily adjustable to assure each student the right height. These chair desks also provide ample storage space in the convenient book box under the seat.

The Skyliner tablet arm chair provides comfort, beautiful appearance, and durability for classrooms and study halls. All Skyliner seating is available in a choice of five attractive colors.



Skyliner No. 520 Tablet Arm Chair

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NEWS...

are contingent upon such proof. A \$5,000,000 bond issue, to begin liquidation after 10 years, has been floated in order to finance the program.

New Chairman Named for Educational Policies Commission

WASHINGTON, D.C. — Lee M. Thurston, state superintendent of public instruction for Michigan, has succeeded Henry H. Hill as chairman of the Educational Policies Commission, a joint commission of the National Education

Association and the American Association of School Administrators. Dr. Hill is president of George Peabody College for Teachers at Nashville, Tenn.

Dr. Thurston, now serving his fourth year as a member of the commission, was recently appointed dean of education at Michigan State College, East Lansing, and will assume his new duties there July 1.

Two new members recently appointed to the commission are Kenneth E. Oberholtzer, superintendent at Denver, and

Lawrence G. Derthick, superintendent at Chattanooga, Tenn. Dr. Oberholtzer, who fills the unexpired term of James B. Conant, former president of Harvard University and now U.S. High Commissioner for Germany, formerly served as an ex-officio member of the commission during his term of office as president of the A.A.S.A.

Dr. Derthick, now president of the A.A.S.A., will serve in an ex-officio capacity on the commission, succeeding Virgil M. Rogers, 1952-53 president of the A.A.S.A. and superintendent at Battle Creek, Mich.



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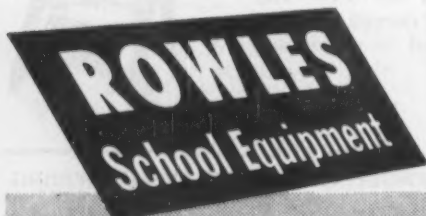


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For complete information on the new Modenaire Series Desks, see your local Rowles School Equipment Dealer, or write to E. W. A. Rowles Company, Arlington Heights, Ill.



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UNESCO Sponsors School for Fundamental Education

PATSCUARO, MEXICO. — The first class of 45 students, representing 17 Latin-American countries, was recently graduated from the Regional Center for Fundamental Education here, a UNESCO sponsored school which in the future may be regarded as the beginning of the first organized attempt to wipe out illiteracy.

The purpose of the center is not to educate the illiterates themselves but to train some 5000 fundamental education specialists who will then return to their own countries and train others in rural education on the simplest, most basic facts of ordinary life and living.

Dr. Lucas Ortiz of Mexico is head of the center, and the faculty includes two citizens of the United States, Emile Tejada, who heads agricultural training, and Margarita Martinez, who is in charge of the home economics training. Both came from New Mexico, where they have trained the North American Indians of the U.S. Southwest.

The instructors are taught to teach their lessons through the most primitive form of picture education, including posters and slogans.

Psychologists Attack Theory of Behavior Response

LOUISVILLE, KY. — Two of the sacred cows of educational psychology were attacked here recently during a symposium on education.

O. Hobart Mowrer of the University of Illinois argued that educational theory that claims we "learn by doing" is not valid because it makes man a mere creature of habit that can respond to new conditions only after he has made mistakes.

"We do not learn behavior responses at all," Professor Mowrer said. Instead

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HERE'S HOW TRANSCOPY DUPLEX WORKS

Insert the document to be copied, with a sheet of Transcopy negative paper, in the front slot of the unit. Electrically driven belts carry the sheets thru the unit exposing the print and ejecting both sheets thru the second slot. Return the original to normal use and insert the exposed negative sheet with a sheet of positive Transcopy paper in the third, for development. Again, electrically driven rollers pull the sheets thru the developer and eject the sheets from the rear slot. Wait just a few seconds for printing to take place, separate the sheets and you have a perfect, ready-to-use positive print — black printing on white background.

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NEWS...

we learn "tension making" or "tension reducing" attitudes, and these factors shape our actions.

Psychologists were urged by Raymond B. Cattell of the University of Illinois to stop studying rats and start concentrating on human beings. "Experiments on animals in learning theory throw little light on the human personality change," he said, "because they measure only one kind of response (reflex), whereas human personality involves many patterns."

Teachers Given a Voice in Policy Making

INDIANAPOLIS. — To aid principals in formulating administrative policies, 60 of the 83 elementary schools here have formed advisory committees, composed of teachers, according to H. L. Shibley, general superintendent of education, in a report to the board of school commissioners. Supply committees also have been set up in 48 schools to give teachers a voice in the distribution of educational supplies in their schools.

In schools that did not form committees, small instructional staffs were acting as a committee of the whole, or some other device to bring teachers into active policy making was being used, Dr. Shibley said.

Seek to Interest Youth in School Administrative Careers

BUFFALO, N.Y. — To encourage high school students to prepare for administrative positions in the public schools, the University of Buffalo recently issued a guidance leaflet.

Portraying school administration as a field full of challenge that needs young people with vigorous minds, the leaflet emphasizes that such a career "is almost unique in that it permits a man to combine scholarly interests and active association with men of affairs."

Peruvian Teachers College Has Texas Trained Faculty

AUSTIN, TEX. — Twelve teachers, who spent nine months studying at the University of Texas, are the nucleus of the 45 member faculty of the new Central Normal School at Lima, Peru, the country's first four-year teachers college.

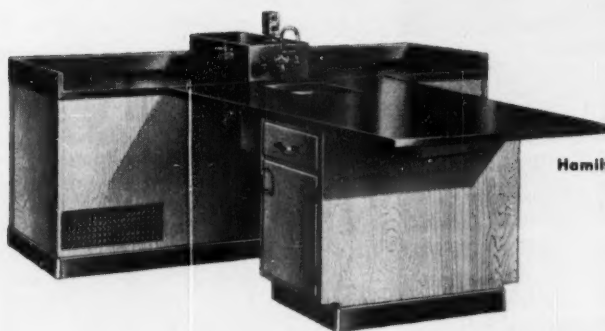
The teacher-training institution, which opened April 1, occupies a completely new plant on a new campus.

The 12 Peruvians came here last June, through arrangements of the education division of the Institute of Inter-Amer-

Hamilton against-the-wall
All- Science Student Tables
offer classroom flexibility



Hamilton 4 Student All-Science Table No. L-5729



Hamilton 4 Student All-Science Table No. L-5730

Shown here are two new Hamilton All-Science Student Tables that advance the trend to against-the-wall floor planning. These handsome, functional units leave the center of the room free for lecture, demonstration and home-room purposes. They bring new flexibility to your floor plans and new versatility to your classrooms, since they enable you to use science classrooms for teaching other subjects.

Hamilton has a lot to show you, a lot to tell you about new developments in their school equipment line. Plan a visit with your Hamilton representative soon. Let him show you how Hamilton's helpful free planning service will help you meet your particular laboratory requirements.

Hamilton Manufacturing Company

TWO RIVERS, WISCONSIN

NEWS...

ican Affairs. A special training program was planned for them by Education Dean L. D. Haskew. George J. Garza was coordinator of the Peruvian teacher education project.

New York Parents Sponsor Group Insurance Plan

NEW YORK.—The United Parents Association of New York City is sponsoring a \$5 a year group accident insurance plan for the city's school children.

The plan, which is on a round-the-clock, every-day-of-the-year basis and which will provide up to \$500 for medical expenses, applies on a mass basis to about 500,000 children attending the 350 public and private elementary and secondary schools affiliated with U.P.A.

Ford Foundation's Aid to Education Continues

PASADENA, CALIF. — Trustees of the Ford Foundation have announced new

appropriations totaling \$18,522,000 for projects to advance education, conservation and international understanding.

Apportionment of grants include: for education advancement, \$9,000,000; for adult education, \$4,000,000; for support of various exchange-of-persons activities, \$2,652,000, and for the Pakistan government's program of village development, \$1,250,000.

Approval is given to further support of the foundation's TV-radio workshop.

Mrs. Roosevelt Says Schools Barrier to Communism

DETROIT. — Mrs. Franklin D. Roosevelt recently praised the nation's school system for its effectiveness in "preventing the youngsters from falling a prey to Communist teaching."

Speaking here to nearly 1000 Detroit teachers at the sixth annual Institute of Democratic Human Relations, she urged community-wide support for the United Nations. Mrs. Roosevelt, formerly a delegate to the U.N., called it "the only machinery in existence to bring about a better world and lasting peace."

P.T.A. Building Begun



At the informal ground breaking ceremony of the new \$750,000 headquarters building of the National Congress of Parents and Teachers, now being built in Chicago, Mrs. J. W. Heylmun of Oak Park, Ill., a vice president, digs the first shovelful of earth. Mrs. T. E. Ludlow of Riverside, Ill., president of the Illinois Congress of Parents and Teachers, stands at Mrs. Heylmun's right. At her left, directing operations, is Mrs. Ellen D. Link of River Forest, Ill., a member of the national board of managers, serving as chairman of the art committee.

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More Economical
to Keep Clean***

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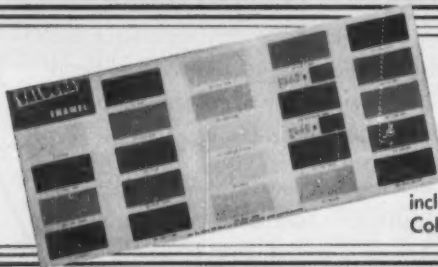
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SCHOOLS

*Looks like
fine white porcelain
But it's tough*

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22 NON-FADING COLORS
including delicate Pastels and Rich
Colorful Deep-Tones

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Just check and mail this coupon, attached to your regular business letterhead, and Valdura will be at your service!

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COMING EVENTS

APRIL

26-29. New York State Association of School Business Officials, Syracuse.

MAY

4, 5. National Association of State Universities, Columbus, Ohio.

29, 30. United Business Education Association, N.E.A., Washington, D.C.

JUNE

19-21. Mountain-Plains Region, United Business Education Association, N.E.A., Estes Park, Colo.

24-26. Centennial Action Program, N.E.A., and affiliated associations, Miami Beach, Fla.

24-27. National Conference on Teacher Education and Professional Standards, Miami Beach, Fla.

28-July 3. National Education Association, Miami Beach, Fla.

JULY

6-17. N.E.A. Classroom Teachers National Conference, SS Nuevo Dominicano.

24-26. National Association of School Secretaries, University of Denver, Denver.

31-Aug. 4. World Confederation of the Teaching Profession, Oxford, England.

OCTOBER

8, 9. American Council on Education, Washington, D.C.

11-14. Conference of Rural Area Superintendents, N.E.A. Department of Rural Education, Omaha, Neb.

11-15. Association of School Business Officials, Cleveland.

19. Association of Urban Universities, St. Louis.

19-23. National Safety Congress and Exposition, Chicago.

NOVEMBER

1-4. International Council for Exceptional Children, N.E.A., Portland, Ore.

26-28. Southern Region, United Business Education Association, N.E.A., Birmingham, Ala.

26-28. National Council for the Social Studies, N.E.A., Buffalo, N.Y.

1954

FEBRUARY

11-13. American Association of Colleges for Teacher Education, N.E.A., Chicago.

13-18. American Association of School Administrators, N.E.A., Atlantic City, N.J.

20-24. National Association of Secondary School Principals, N.E.A., Milwaukee.

21-26. Association for Supervision and Curriculum Development, N.E.A., San Francisco.

MARCH

26-31. Music Educators National Conference, N.E.A., Chicago.

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We at Ceco believe that facts and only facts should be given the
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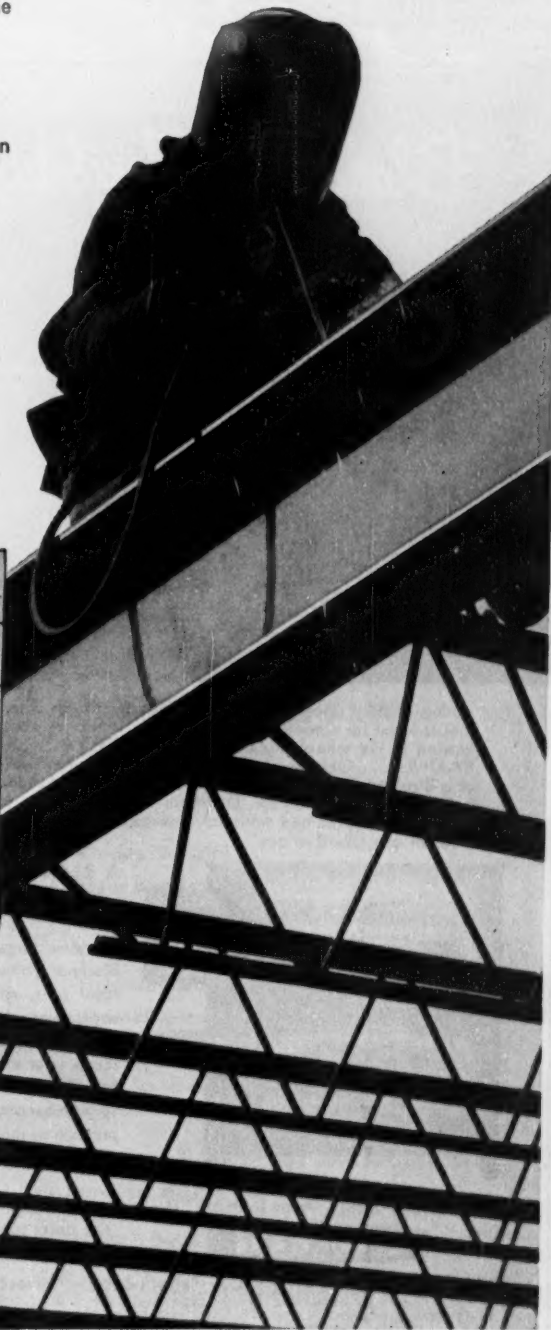
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Check building methods Use this PROOF chart	Ceco Steel Joist Construction		Building Method A		Building Method B	
	Yes	No	Yes	No	Yes	No
Lightweight ... the "dead load" is low yet strength is not sacrificed	✓					
Fast and Easy to erect ... no special equipment or false-work necessary	✓					
Self Centering ... form work rests directly on joists ... no additional support needed	✓					
Conceals Conduits ... saves space. Ceilings attach to joist, eliminating suspended ceiling	✓					
Fire Resistant ... ideal with incombustible top slab and metal lath plaster ceiling	✓					
Sound Resistant ... with concrete slab above and plaster ceiling below	✓					
Non-shrinking ... no warping, cracking, sagging or shrinking	✓					
Termite Proof ... cannot be damaged by rodents, termites or insects	✓					
Versatile ... designed for office buildings, schools, stores, hospitals, apartments, plants	✓					
Low Cost ... light-weight con- struction reduces weight of support- ing beams, columns and footings	✓					



NEWS...

Overseas Teacher Fund Seeks Funds for Korean Aid

WASHINGTON, D.C. — To aid Korean teachers in their task of educating the children of that country, the N.E.A.'s committee on international relations has reactivated the Overseas Teacher Fund and is asking all American teachers for immediate, direct help.

The specific goal of the campaign is to provide funds for new warm clothing for the men and women teachers in Korea. Permission has been granted to

the National Education Association to distribute directly through CARE.

Supt. Broome Declines Memorial

ROCKVILLE, MD. — Supt. Edwin W. Broome of Montgomery County has rejected a citizens' proposal to create a memorial to mark his 36 years of service. Dr. Broome will retire at the end of this school year. The veteran school administrator agreed, however, to a move that will bring together his ideas on education for publication in a book.

ABOUT PEOPLE

SUPERINTENDENTS . . .

W. R. Thomas, principal of Miami Senior High School, Miami, Fla., for more than 25 years, has become superintendent for the Dade County schools in Florida, succeeding **James T. Wilson**, whose resignation was announced in the March issue. **Daniel F. Westfall**, administrative assistant to Mr. Wilson, had his contract extended for two additional years.

Frank F. Snyder has been named superintendent at Northbrook, Ill., effective July 1. Dr. Snyder, formerly curriculum director and consultant at Northbrook, will succeed **Frank M. Himmelmann**, who has joined the faculty of Wisconsin State Teachers' College, Milwaukee.

Raymond C. Richer, formerly principal of the Lyman School at Westboro, Mass., has been appointed superintendent at Marlboro, Mass.

Charles T. Thomas, commercial instructor and assistant superintendent at Alden, Kan., for the last four years, has been named superintendent at Alden. Mr. Thomas succeeded **Maynard Peck**, who is now a professor of economics at Sterling College, Sterling, Kan.

Ollie Hatcher has been appointed superintendent at Sasakwa, Okla., succeeding **C. D. Gaines**, who had held the position since 1947.

Virgil Blossom, superintendent at Fayetteville, Ark., since 1941, has succeeded **Harry A. Little** as superintendent at Little Rock, Ark. Mr. Little's leave of absence at Little Rock to head a UNESCO education mission to the Philippines was announced in the January issue. Mr. Little, who still had about six months left on a three-year contract after expiration of his one-year leave, has resigned the superintendency at Little Rock.

J. E. Nelson, for the last five years superintendent at West Concord, Minn., has resigned. His successor is **Clarence Epseth**, formerly principal there.

Ralph C. Shepard has succeeded **Rex A. Myas** as superintendent at Ashley, Mich.

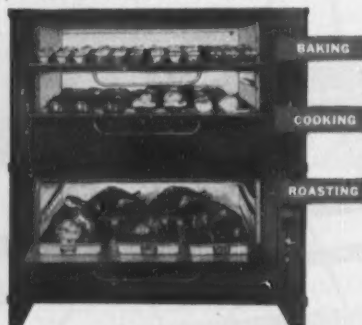
Leon O. Fisher has succeeded **Eugene J. Bradford** as superintendent at Washington, N.J. Mr. Bradford is now superintendent at Glen Rock, N.J.

Clarence E. Henning is now superintendent at Anacortes, Wash.

Glen A. Wilson has resigned as superintendent of the high school district at Perris, Calif. On July 1 he will become superintendent of the Puente union high school district in Los Angeles



Young healthy appetites demand nourishing meals. This modern kitchen tool is ideal for schools to keep a steady stream of oven-prepared foods flowing to the school tables . . . **THREE WAYS . . . ROASTING . . . BAKING . . . GENERAL OVEN COOKERY.** The speed and flexibility of a Blodgett Oven make it possible to cook your food to perfection and have it ready on schedule. Dietitians recognize in hot, nourishing oven-prepared meals the best means of serving a wide variety of meals at prices students can afford to pay.



A BLODGETT COOKS

70% OF YOUR MENU

On one large, single deck a Blodgett offers capacity for meat pies, meat loafs, baked vegetables or pastries, desserts and hot breads. Another deck roasts your meat or bakes your fish. You are always assured variety because a Blodgett can prepare as much as 70% of the cooked food on your menu.

Blodgett makes ovens from its "Basic Three" design which provides the units to make 24 models.

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YOU'LL find it practically impossible to chip, gouge or stain rugged G-E Textolite — pencil marks, ink spots are easily wiped off — it is practically maintenance free. Its smooth hard surface is perfect for writing — it is designed with near perfect light reflectance qualities. You have a wide choice of colors and patterns.

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Wears like iron

Cleans like glass

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Available in a wide range of wood grain patterns and colors.

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Hyde Park, L. I., N. Y. • New York 55, N. Y. • Port Newark 5,
N. J. • Philadelphia 34, Pa. • St. Louis 16, Mo. • San Fran-
cisco 24, Calif. • San Leandro, Calif.

NEWS...

County, California, succeeding **S. Chester McIntosh**, who resigned after three years as coach, teacher and district superintendent.

Karl E. Whinnery, who will retire as superintendent at Sandusky, Ohio, September 1, will be succeeded by his assistant, **Carl L. Mackey**.

C. A. Palmer has resigned as superintendent at Kasson, Minn., a position he had held for the last six years.

C. W. Miller, supervisor of instruction at Fredericksburg, Va., since 1945, has

been appointed acting superintendent at Fredericksburg to fill out the term of **Guy H. Brown**, who died recently after serving as superintendent for 26 years.

Lyle L. Bruce has been named superintendent at Malvern, Ark., effective July 1. He will succeed **Charles H. Tietjen**, who has headed the Malvern schools for the last two years.

William K. Meek, who for the last seven years has served as superintendent at Stanberry, Mo., has resigned, effective at the end of the school year.

George E. Henney, superintendent at Potter, Neb., for the last four years, has resigned.

John H. Longstreet, formerly superintendent at Windom, Minn., will succeed **Erling O. Larson** as superintendent at Northfield, Minn. Mr. Larson has accepted the superintendency at Mankato, Minn.

Robert G. Millikin, associate superintendent of secondary education at Pittsburgh, has retired because of ill health.

E. W. Schultz has resigned as superintendent at Barnesville, Minn., effective at the end of the 1952-53 school term. Mr. Schultz has been superintendent there since 1948.

Edwin C. Butterfield has been appointed superintendent at Herington, Kan. Since 1950 he had served as principal of the Herington High School. Mr. Butterfield succeeds **Earle T. Anderson** in his new position.

William W. Bailey, assistant superintendent in charge of business at Rock Island, Ill., has resigned. **John H. Ahl**, the present assistant at Rock Island, has been appointed to fill the position.

Frank D. Austin, formerly business manager of the school district at Port Arthur, Tex., is now business manager at Amarillo, Tex., succeeding **George Waddill**, who has retired.

Stephen M. Glaza is now superintendent at Millington, Mich.

H. I. Willett has been reelected superintendent at Richmond, Va., for a four-year term. He has held the position for the last seven and a half years.

Milburn P. Anderson, superintendent at Berkeley, Mich., is the new president of the Michigan Education Association, and **Ellen Solomonson** of Sault Ste. Marie is the new president-elect.

I. W. Breidenstein, superintendent at Norborne, Mo., for the last two years, has resigned.

Arthur M. Main has been appointed superintendent at Claremont, Calif. He had been acting superintendent since last November, when **Supt. William C. Gaige** left to become president of Rhode Island College of Education.

O. F. Barnard will succeed **Clifford Lahman** as superintendent at Elwood, Kan.

A. Strode Brockman, division superintendent for Floyd County, Virginia, will become superintendent for Wythe County, Virginia, July 1, succeeding **Fendall R. Ellis**, who has held the position since 1945. Mr. Ellis is the new superintendent at Charlottesville, Va.



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School's master key
opens every locker.

in a class by
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PADLOCKS

No. 1525 The finest in key-controlled padlock protection. Thousands of combinations protect the student — yet only one school-owned Master Key opens every locker. Precision built for long life, trouble-free service. Priced to fit school budgets.

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Unbeatable protection for lab equipment, storage rooms, gates, athletic lockers, book stores, etc.

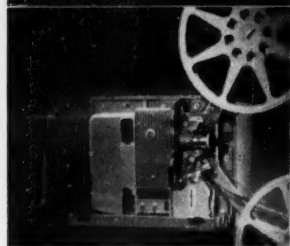
Kodak announces...

3 brilliant new Pageant models ...and a heavy-duty silent projector for critical movie analysis

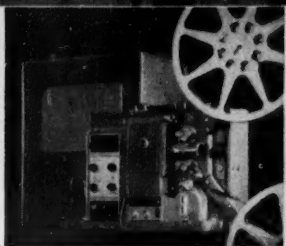


The Pageant is the projector that has revolutionized 16mm. sound projection... the first compact projector with the optical and tonal excellence of full-scale 16mm. equipment... the first to offer permanent prelubrication—an exclusive 16mm. feature that eliminates *completely* the chief causes of projector breakdowns!

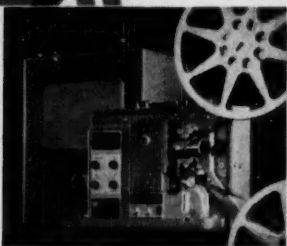
At just \$400, the Pageant is still the economical top-choice projector for average 16mm. sound-and-silent projection. But now from Kodak have come four more projectors—each “tailor-made” to meet a particular 16mm. projection requirement. See your Kodak Audio-Visual Dealer about a demonstration—or use the check slip below for further information.



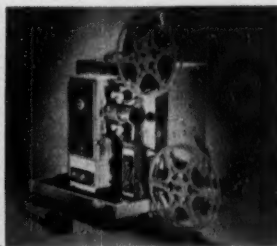
NEW Kodascope Pageant Sound Projector, Model AV-071, with Plus-40 Shutter A super-brilliant version of the standard Pageant, it incorporates an extremely efficient two-bladed shutter which provides vastly increased illumination—more than 40% greater than the sound-and-silent projector. Ideal for projection under difficult conditions... in hard-to-darken rooms, in halls or auditoriums... wherever extra image brilliance, long screen “throws,” or unusually large picture areas are required. \$400. Sound projection only.



NEW Kodascope Pageant Sound Projector, Model AV-151, with 15-watt amplifier Features an extremely high-fidelity amplifier, the extra capacity of the 12-inch Kodak De Luxe Speaker, and provision for the finest sound fidelity obtainable with a 16mm. portable projector. Ample power output and speaker capacity for auditorium projection... plus separate bass, treble, and fidelity controls for unmatched sound quality in cramped quarters as well as in spacious auditoriums. \$530. Sound-and-silent projection.



NEW Kodascope Pageant Sound Projector, Model AV-151E, with Plus-40 Shutter and 15-watt amplifier Combines increased light output produced by Kodak's Plus-40 Shutter with the precise tone and volume features of the Model AV-151. No other portable projector gives you such brilliant screening—even on long throws—plus such excellent tonal quality at all volume levels. The Pageant, Model AV-151E, is capable of meeting every 16mm. requirement short of a theater-type installation. \$530. Sound projection only.



NEW Kodascope Analyst Projector Heavy-duty silent projector designed to meet the critical requirements of 16mm. motion-picture analysis... ideal for such fields as time-and-motion study and sports analysis. Features a heavy-duty reversing mechanism operated from a remote-control switch on a 3-foot cord. Separate motor drives blower at constant speed, permitting repeated, instantaneous reversals without film or projector damage. With Daylight Projection Viewer, for desk-top movie study, \$295. Silent projection only.

Prices subject to change without notice

For top sound coverage in acoustically difficult locations, you can step up volume without distortion with the inexpensive Kodak Multi-Speaker Unit... 3 additional speakers in matching case. Simply plug into any Pageant.

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Kodak

NEWS...

George Wedelin has resigned as superintendent at Stafford, Kan.

Harvey C. Cutts, superintendent at Greenville, Ga., since 1933, is the newly elected president of the Georgia Education Association.

Ray Dennis has been named superintendent at Corunna, Mich., succeeding **Clarence R. Lubbers**.

Mrs. Willie Perdue is the new superintendent at Pottsboro, Tex., succeeding **H. H. Vestal**.

Monroe Melton, assistant superinten-

dent in charge of business affairs for the schools of Louisville, Ky., for the last six and one-half years, has resigned to accept a similar position at Miami, Fla.

Shirley L. Held, high school principal at Mora, Minn., for the last two years, will become superintendent at Grove City, Minn., July 1, succeeding **L. A. Mossler**, who will retire.

Chester Eastep will take office September 1 as superintendent of the Rowland Laboratory School at State Teachers College, Shippensburg, Pa.

John J. Maloney, who resigned recently as principal of the high school at Wood Lake, Minn., is the new superintendent at Lake Wilson, Minn.

L. H. Battle will succeed **C. J. Cheves** July 1 as superintendent at Gainesville, Ga. For the last eight years Mr. Battle has been superintendent at Dublin, Ga. Mr. Cheves has accepted the superintendency of the Griffin-Spalding County consolidated school system in Georgia.

N. B. Smith has resigned as superintendent at Grandfield, Okla. He had held the position since 1947.

Guy C. Miller has resigned as superintendent at Niobrara, Neb.

D. B. Dallam, who will complete 13 years as superintendent at Talmage, Neb., at the end of this term, has resigned.

Frank C. Densberger, superintendent at Kenmore, N.Y., since 1915, has retired.

Glenn C. Parker has resigned as superintendent at Walker, Minn.

Norman B. Scharer, high school principal at Ventura, Calif., has accepted the superintendency at San Gabriel, Calif.

Charles Gibson is the new superintendent at Plains, Kan., succeeding **D. C. Brandner**.

W. H. Crawford, dean of the junior college at Dodge City, Kan., for the last 11 years, has been named acting superintendent at Dodge City. He succeeds **A. G. Schroedermeier**, superintendent there for the last 18 years.

Harry H. Moore, superintendent at Franklin, Pa., for the last three years, has accepted an appointment as supervising principal of the borough of Bethel schools in Allegheny County, Pennsylvania.

Ralph B. Tate will succeed **O. Lloyd Gillespie** as superintendent at Libby, Mont. Mr. Tate was junior-senior high school principal at Whitefish, Mont., for the last 22 years.

James Liepman has resigned as superintendent at Lillis, Kan.

A. E. Vanzo, superintendent of the rural agricultural school at Kaleva, Mich., has been named Manistee County superintendent to succeed the late Supt. **A. J. Dahlgren**.

John S. Haitema, an assistant superintendent of public instruction for Michigan, has accepted a two-year appointment as director of education of the territory of Guam. Dr. Haitema has taken a leave of absence from the state department of public instruction.

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SKIN DEGERMING CLEANSER

These two youngsters are putting on invisible gloves! How? Simply, by washing their hands with liquid SDC skin degerming cleanser. SDC provides a continuous barrier to infection and disease transmission; protects against secondary infections resulting from cuts and abrasions.

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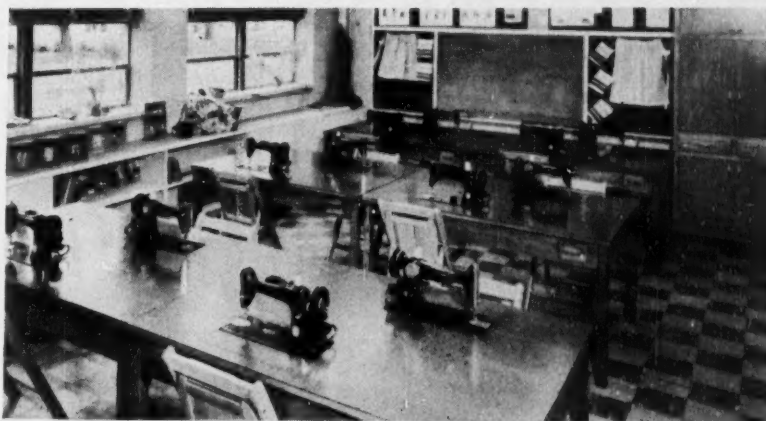
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With the new **SINGER** Combination Sewing and Cutting Table!

Provides machines for two students, work space for two more!

Now—even if classroom space is limited, you can have *two* machines for every four students!

No need for a separate row of space-consuming cabinets. No need for the class to be constantly shifting and shuffling around. The new SINGER® Table holds two full-sized SINGER Machines—and at the same time provides work space for two other students.

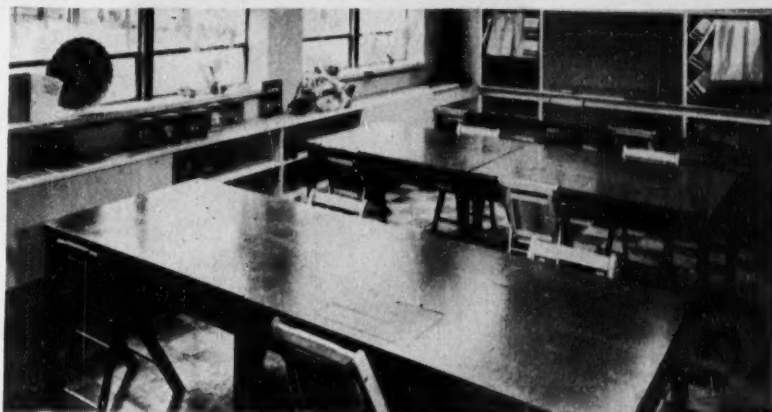


Converts to a smooth-surface cutting table in a jiffy!

You don't have to use up space or expense with separate cutting tables.

Simply lower machines into SINGER Table—slip removable panels back into place—you have a smooth, continuous surface. (An extra blessing if the room is used for other classes or study hall.)

Developed at the suggestion of Dr. Anna M. Dooley, representing the New York City Board of Education—this new table meets *every* sewing room need.



Many sewing classrooms . . . like the one you see here at the Abett School in Fort Wayne, Indiana . . . are installing the new SINGER Combination Sewing and Cutting Table. It is one of the most practical pieces of sewing class material ever designed.

Offers you all these de luxe features:

- 5-ply construction. Durable Formica or Masonite top. Solid birch legs.
- 4 handy drawers.
- Built-in knee levers.

- Dustproof shields which completely enclose machines when they are lowered into table.
- Tamper-proof locks on panels.
- Provision for adding automatic switch to cut off power when machines are lowered.
- Size 60" x 42" x 30".

Available with any of the three regular SINGER® Sewing Machine classroom heads—at a *special school discount*. See how it can save time and work for you—make *your* classroom more pleasant, more efficient.



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Please send folder giving details about Combination Sewing and Cutting Table, and showing suggested classroom layouts.

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NEWS...

W. Ross Andre is the new district superintendent at Bernardsville, N.J. He has held the post in an acting capacity since last spring, succeeding **Harry G. Stuart**.

B. H. Mead, superintendent at Gothenburg, Neb., for the last five years, has resigned.

Norman Edward Kukuk, formerly of Marquette, Mich., is now superintendent at Holton, Mich.

Weston Brook, formerly superintendent at Hulett, Wyo., will become super-

intendent of Garden County High School at Oshkosh, Neb., next year, succeeding **Jack O. L. Saunders**.

Sam Mouck has succeeded **N. D. Hazelbaker** as superintendent at Mountain Grove, Mo. Mr. Mouck formerly was principal at Mountain Grove.

J. Elliott Cameron, principal of the South Sevier High School, Monroe, Utah, has been named superintendent of the Sevier school district at Richfield, Utah, succeeding **A. J. Ashman**, who has retired after 35 years as superintendent.

John W. Harold, superintendent at Hartley, Iowa, since 1946, will become superintendent at Carroll, Iowa, effective July 1. He succeeds **R. A. Naffziger**, who resigned.

Taisto C. Filppula, former superintendent at Bath, Mich., is now superintendent at Romeo, Mich., succeeding **Elbert Van Aken**.

R. J. Skotte is the new superintendent of schools at Kellogg, Minn.

Ralph D. Harrell, formerly principal of the elementary schools at Paxton, Ill., is now acting superintendent at Paxton.

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DOWNLIGHT**

- Square, silver-mirrored Permaflexor, lamp and lens positioned for maximum efficiency with controlled brightness.
- Choice of extensive distribution, intensive distribution and drop bowl lens.
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SUPERVISING PRINCIPALS . . .

Elam E. Kerschner has resigned as supervising principal at Ambler, Pa., effective at the end of the school year. He has been a member of the Ambler faculty for 34 years.

Gregory M. Benson, formerly high school principal at Falconer, N.Y., is now supervising principal of the common school district at Falconer, N. Y.

Robert D. Forrest, the new supervising principal of the common school at Pavilion, N.Y., was formerly vice principal at Pavilion.

Robert Johnson is the new supervising principal of the Greenwood Joint High School at Millerstown, Pa., succeeding **M. Luther Scott**.

Clifford V. Jones is now supervising principal of the area schools at Port Allegany, Pa., succeeding **Fred N. Hardy**.

IN THE COLLEGES . . .

Frank W. Dickinson has resigned as dean of the University of Denver College of Arts and Sciences. His successor is **James E. Perdue**. Dr. Dickinson, for 36 years a member of the university faculty, has been named dean emeritus of the college of arts and sciences. Dr. Perdue, who joined the university's faculty in 1946 as an assistant professor of social science, was named acting dean in 1947 and has since served as associate dean.

Lorin E. Bixler, head of the department of education at Muskingum College, New Concord, Ohio, was recently appointed director of placement service at the college, succeeding **J. G. Lowery**, who retired last August.

Charles B. Park has been appointed director of special studies at Central Michigan College's division of field service, effective July 1. In his new work, his principal duty will be to direct the research project the college is conducting through a Ford Foundation grant. The project is concerned with better utiliza-

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NEWS...

tion of teachers' competencies, and the research is being carried on at Bay City, Mich., where Mr. Park has been superintendent since 1948.

Ward Darley, M.D., director of the Colorado University Medical School, has been named president of the university, succeeding Robert L. Stearns. Dr. Darley will assume his new duties July 1, when Dr. Stearns resigns to become president of the Boettcher Foundation. Dr. Darley has been serving as vice president of the university.

Ben Hilburn, administrative assistant to Fred Mitchell, president of Mississippi State College, was named acting president of the college to serve at least until June, when Dr. Mitchell's sick leave ends.

E. Adamson Hoebel has succeeded O. Meredith Wilson as dean of the university college, University of Utah. Mr. Wilson resigned in January to become secretary of the Fund for the Advancement of Education of the Ford Foundation. Dr. Hoebel has been head of the

department of anthropology at the university since 1948.

OTHERS...

Edward C. Pomeroy has succeeded Charles W. Hunt as secretary-treasurer of the American Association of Colleges for Teacher Education. Mr. Hunt has served in that capacity since 1928. Dr. Pomeroy, formerly assistant to the general secretary of Teachers College, Columbia University, joined the A.A.C.T.E. headquarters staff in 1951 as associate secretary. The organization, a department of the National Education Association, has its headquarters in Oneonta, N.Y.

W. B. O'Donnell, a professor at New Mexico College of Agriculture and Mechanic Arts and 1953-54 president of the New Mexico Education Association, has been named executive secretary of the association. He succeeds the late John P. Steiner.

DEATHS...

Guy H. Brown, superintendent at Fredericksburg, Va., since 1929, died February 19. Until two years ago Mr. Brown had served as principal of James Monroe High School, Fredericksburg, as well as superintendent.

John A. De Camp, formerly superintendent at Utica, N.Y., died March 3. Mr. De Camp, who was associated with the Utica schools from 1917 until his retirement in 1941, was twice president of the New York State Teachers Association.

J. F. Graham, former superintendent of the union high school district at Lemore, Calif., died recently. He had been principal of Lemore High School for 35 years, and the last 14 years he also served as superintendent. He retired in 1950.

Charles E. Lord, who had devoted 35 years to educational work, died recently. He had served as superintendent at Bethel and Deer Isle, Me., and from 1923 to 1946 he was superintendent at Camden, Hope and Thomaston schools in Maine. Mr. Lord was a past president of the Maine Teachers Association.

Boyd H. Bode, graduate lecturer in philosophy at the University of Florida and professor emeritus since 1944 at Ohio State University, died March 29. He also was a former faculty member of the University of Illinois. Dr. Bode, who had written many articles on education, was a member of the editorial consultant board of *The Nation's Schools* from 1931 to 1936.

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THE BOOK SHELF

Printed publications of interest to school administrators are listed as received.

ADMINISTRATION

Democratic Method and Experiences in Educational Meetings. By Roy M. Hall and Donald G. Nugent. An application of concepts of group process to school administration. Southwestern C.F.E.A., Austin, Tex. Pp. 41.

Administration of Vocational Education at State and Local Levels for Superintendents and Boards of Education. Practices and procedures used in administration of vocational education. American Vocational Association, 1010 Vermont Ave., N.W., Washington 5, D.C. Pp. 24. Free.

Administration of Public Laws 874 and 815. Second annual report of the commissioner of education, 1952. U.S. Government Printing Office, Washington 25, D.C. Pp. 127. 55 cents.

Annual Report of the Federal Security Agency, 1952. Office of Education. U.S. Government Printing Office, Washington 25, D.C. Pp. 81. 15 cents.

BUSINESS MANAGEMENT

Proceedings. 38th convention of the Association of School Business Officials of the United States and Canada, October 12 to 16, 1952. Atlantic City, N.J. Pp. 440.

CURRICULUM

Science for Children and Teachers. By Herbert S. Zim. Bulletin No. 91 of the Association for Childhood Education International, 1200 15th St., N.W., Washington 5, D.C. Pp. 55. 75 cents.

Local Policies for Agricultural Education in the Public Schools. By Herbert M. Hamlin, professor of agricultural education, University of Illinois. Office of Field Service, University of Illinois, Urbana. Pp. 53. 40 cents.

A Public School for Tomorrow. By Marion Nesbitt. A description of the Matthew F. Maury School, Richmond, Va. Presenting the characteristics of the modern school. A foreword by William Heard Kilpatrick. Harper and Brothers, 49 E. 33d St., New York 16. Pp. 164. \$2.50.

Communication. A guide to the teaching of speaking and writing at all grade levels. Minneapolis public schools. 811 N. E. Broadway, Minneapolis 13. Pp. 118. \$1.75.

GUIDANCE

Educational Testing Service. Fourth annual report, 1951-52, to the board of trustees by the president, Henry Chauncey. Educational Testing Service, 20 Nassau St., Princeton, N.J. Pp. 104.

Child Development. By William E. Martin and Celia Burns Stendler, University of Illinois. The process of growing up in society. Combines the findings of social psychology and cultural anthropology to explain influences on child behavior. Harcourt Brace and Co., 383 Madison Ave., New York 17. Pp. 520. \$4.75.

INTERNATIONAL EDUCATION

Study Abroad. A UNESCO international handbook. Fellowships, scholarships and educational exchange. Volume V, 1952-53. Columbia University Press, International Documents Service, 2960 Broadway, New York 27. Pp. 436. \$2.

PERSONNEL

Educators Opinion Inventory. A morale and attitude survey questionnaire of 127 items designed for use with school system personnel to determine attitudes and opinion concerning school policies and procedures. Science Research Associates, 57 W. Grand Ave., Chicago 10. Pp. 5.

PUBLIC RELATIONS

Putting PR Into HPER. By William K. Streit, director, physical education, and John F. Locke, director, school-community relations, Cincinnati public schools. A public relations handbook for school personnel in the health, physical education, and recreation fields. Examples of typical public relations problems in their field. National School Public Relations Association, 1201 16th St., N.W., Washington 6, D.C. Pp. 64. \$1.

New Challenges to Our Schools. Edited by Sturges F. Cary. Background information and arguments taken from current books and magazines on the rôle of the modern school in our society, with emphasis on current attacks. The Reference Shelf, Vol. 26, No. 1. H. W. Wilson Company, 950 University Ave., New York 52. Pp. 214. \$1.75.

SCHOOLHOUSE PLANNING

Classrooms for How Many? Enrollment handbook of the commission on school buildings of the state of New York. Technics of making future enrollment estimates and interpreting data in terms of school building construction data. Albany, N.Y. Pp. 84.

The Junior High School, Its Furniture and Equipment. By N. L. Engelhardt, N. L. Engelhardt Jr. and Stanton Leggett, 551 Fifth Ave., New York 17. Pp. 179. \$7.50.

OF GENERAL INTEREST

The Uneducated. By Eli Ginzberg, professor of economics, Columbia University, and Douglas W. Bray. Offers several significant recommendations as to what the nation can do about a major countrywide problem—the "still excessively large" population of 2,500,000 illiterates. The first major findings of the Conservation of Human Resources Project, based on an exhaustive research study of illiterates in the armed services during World War II. Columbia University Press, New York 27. Pp. 262. \$4.50.



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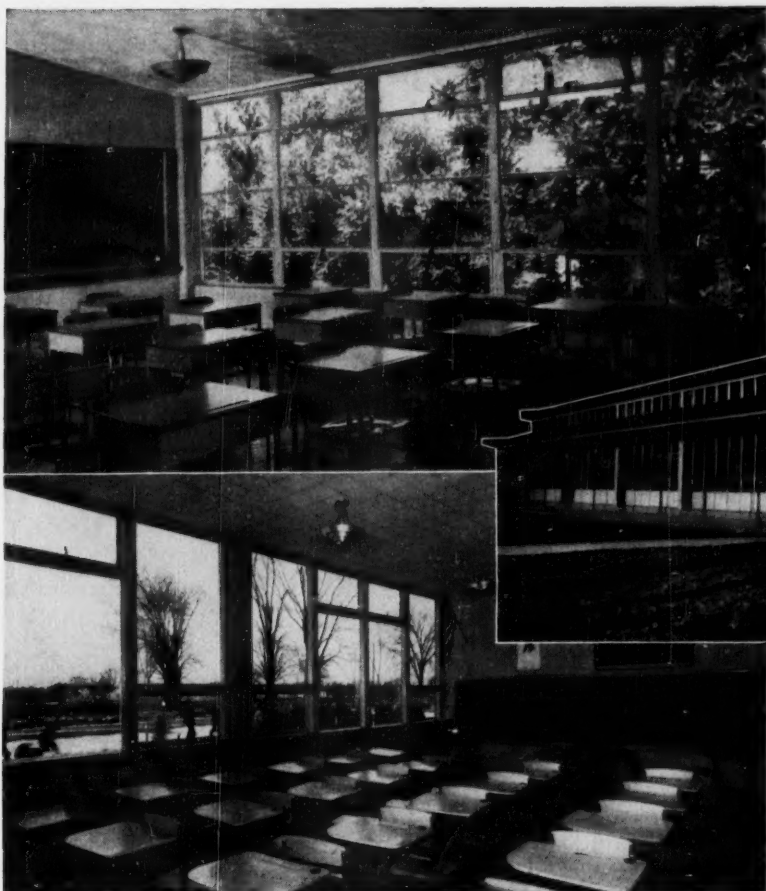
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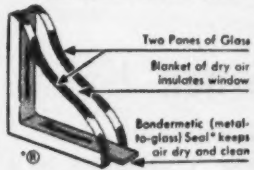
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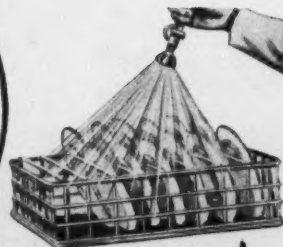
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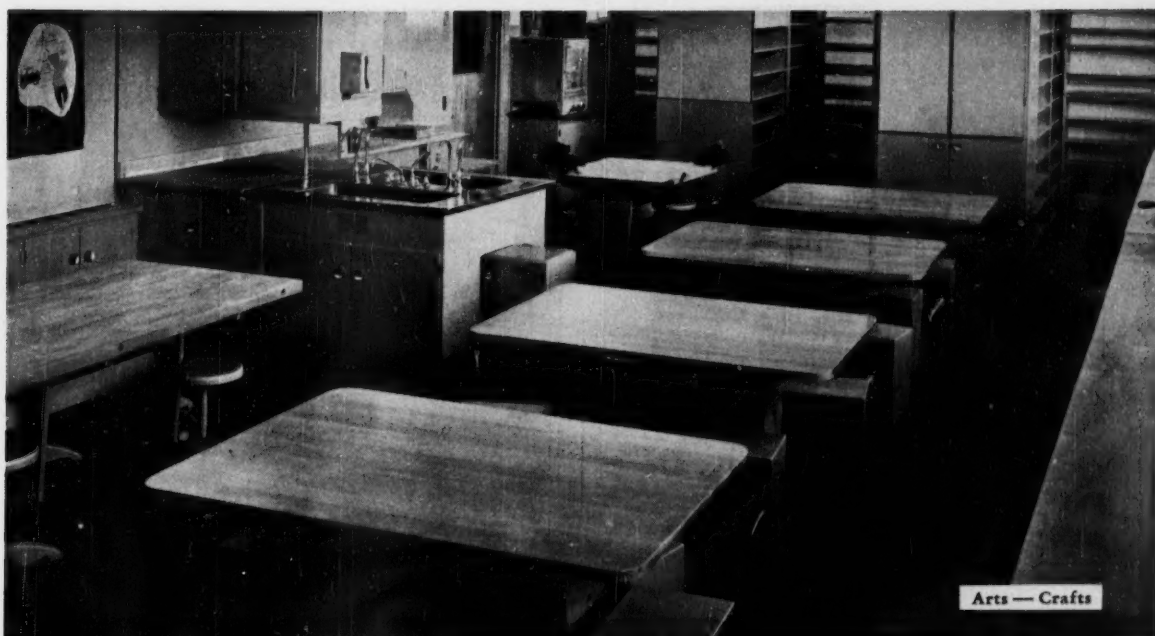
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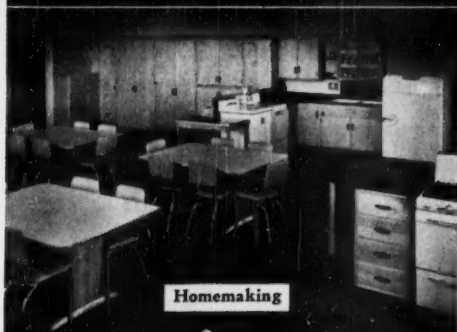
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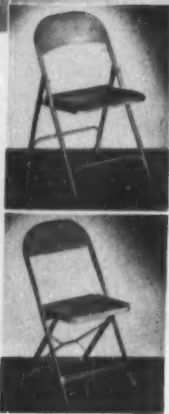
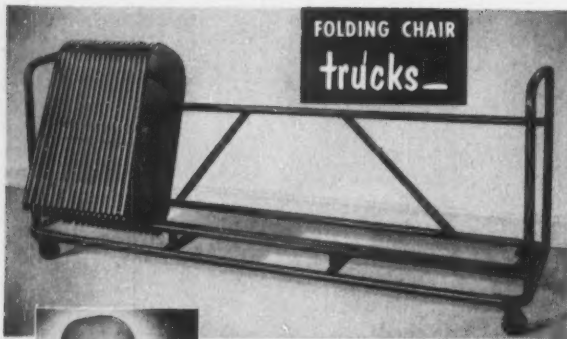
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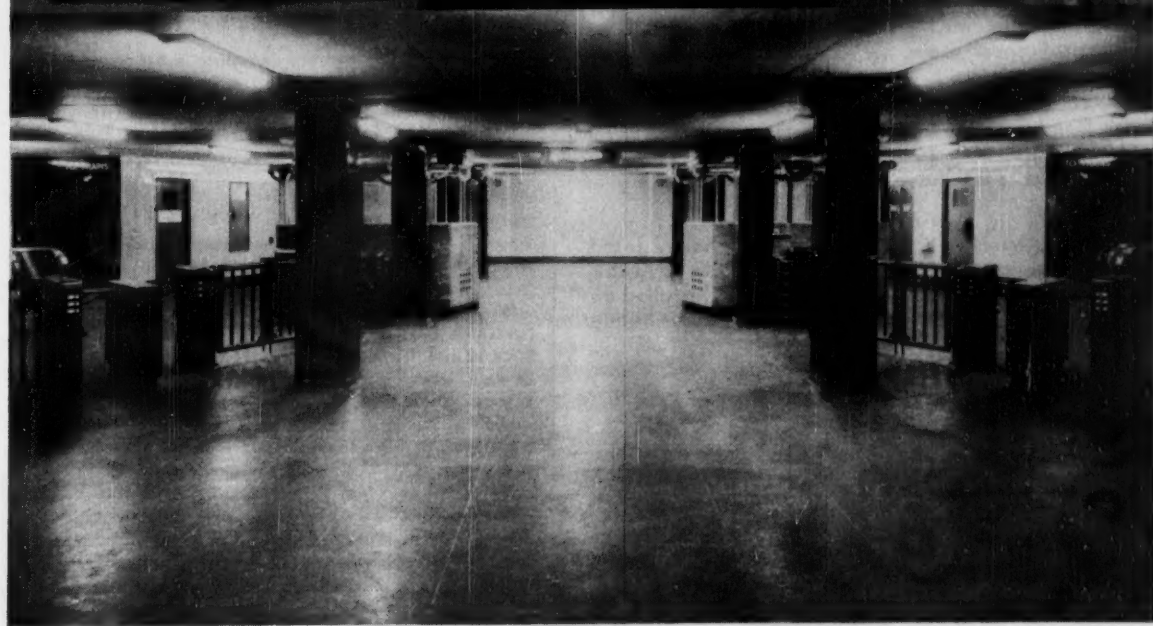
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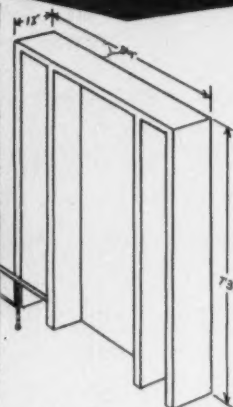
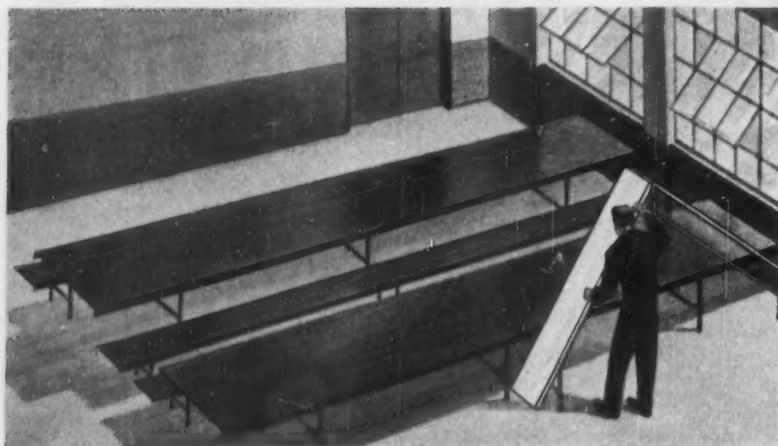


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What's New FOR SCHOOLS

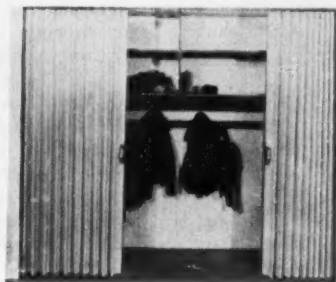
MAY 1953

Edited by BESSIE COVERT

TO HELP YOU get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 196. Just circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. The NATION'S SCHOOLS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Extendible Door

Extendoor, a new accordion fold door for closing off rooms or sections of rooms, operates on the extendible "X" principle. This is the same extension principle used in gates and telephone racks and sets up a continuous chain of levers and pivots that applies simultaneous and uniform action throughout the entire width of the



closure. Thus there is no binding or jamming and the closures open or close quietly with the lightest touch applied at any point on the leading front post. The substantial, flexible interior framework with full-length vertical panels gives a permanent backing to the fabric folds. The panels are specially treated so that they are impervious to moisture, free from rust or mildew and rigidly strong.

The pliable outside fabric is so fastened to the vertical panels that the accordion contour of the folds remains uniform and permanently smooth and neat. The panels act as a sound trap, retarding normal noises. This efficient sound deadening barrier is particularly important when Extendoor is used to divide classrooms or other areas for various uses.

Since the Extendoor folding door can be opened or closed by a "kitten touch" at any point along the leading front post, the hand grip is placed for natural, easy reaching. It is fine metal builder's hardware which can be equipped with double-action latch, fine tumbler lock and built-in safety features. The Extendoor can be used for space saving and other functional as well as decorative purposes and can be installed on straight or curved tracks in classrooms, gymnasiums or other areas. Extendoor, Incorporated, Dept. NS, Muskegon, Mich. (Key No. 475)

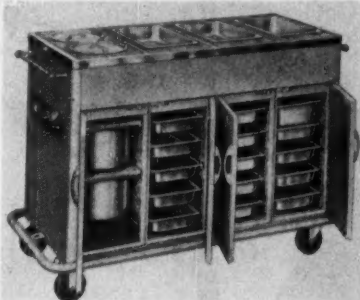
Aluminum Frame Folding Chairs

Beauty, comfort and strength are combined with extremely light weight in the new Lyon aluminum frame folding chairs. The chairs fold flat for compact storage, are comfortable in design and sturdy.

The steel seats and backs are finished in baked-on enamel, in two colors either walnut or taupe. The aluminum frame has a clear varnish finish. The chair is available in three models: aluminum frame with steel seat and back, with cane steel seat and back, and with pressed wood seat over steel and steel back. Lyon Metal Products, Inc., Dept. NS, Aurora, Ill. (Key No. 476)

Portable Food Cart

A complete meal, including salad, soup, entree, vegetable and dessert, may be served from the new Naco Portable Electric Food Cart. Hot meals stay hot in the insulated "hot" compartments and cold foods stay fresh and palatable in the refrigerated compartment. The cart is loaded and then is plugged into any convenient outlet when the cart reaches the serving area, keeping the hot food hot until served. Each cart holds 18 serving pans or 18 fireless

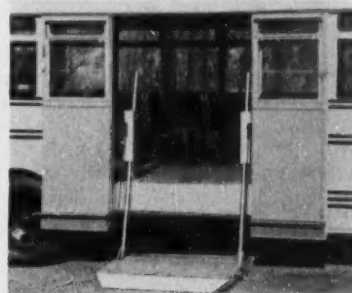


cooker pots in the hot section and six pans in the cold section.

The cart has sectional heat regulators for greater heat efficiency. It is easy to clean and can be washed or steam cleaned in a minimum of time. In transit the insulated cover is placed on top of the cart to keep food clean and hot. The cart is easily moved by one person. National Cornice Works, Food Service Div., Dept. NS, 1323 Channing St., Los Angeles 21, Calif. (Key No. 477)

Bus Lift for Crippled Students

The problem of transporting crippled children who are confined to wheel chairs can be solved with the Wayne Liftgate. The special gate is installed in the side of the bus. Double doors open and the Liftgate is lowered to the pavement so that the wheel chair is easily rolled onto it. Then the Liftgate,



powered by battery so that the bus driver can load the crippled child without leaving other children in the bus while the engine is running, is raised to the floor level of the bus and the wheel chair is rolled into place. The Wayne Liftgate automatically folds flush with the bus wall after loading so that it is out of the way, and the special doors are closed and locked manually by the driver from outside. The whole operation is simple and removes all strain for driver and child. Wayne Works, Inc., Dept. NS, Richmond, Ind. (Key No. 478)

Greaseproof Tile

The new Vinylized Azphlex Greaseproof Tile is a low cost, dependable floor covering. It is designed to offer exceptional resistance to all kinds of greases and oils. The tighter texture gives a smooth surface that resists the wearing-in of grime and dirt. The tile is unusually flexible and is offered in twelve bright, decorative colors to blend with any modern or traditional decor. The marbled pattern is distributed throughout the thickness of the tile so that it remains throughout its life. The new Azphlex tile is available in standard, border and special sizes in $\frac{1}{8}$ inch and $\frac{3}{16}$ inch thicknesses. Uvalde Rock Asphalt Co., Dept. NS, P. O. Box 531, San Antonio 4, Texas. (Key No. 479)

What's New ...

Filmstrip Library Plan

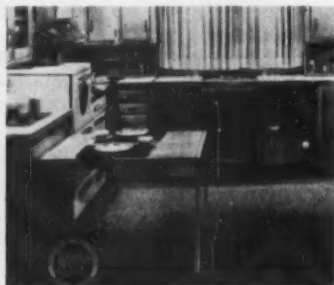
The new filmstrip library plan has 90 indexed compartments for as many filmstrip titles, thus permitting an organized plan for filing and finding filmstrips. The system is designed for classroom use so that each room, grade or department of the school can have an organized plan. For larger libraries of filmstrips, another cabinet can be lock-stacked on top of the original one, using a 2 drawer or 4 drawer model. One or both of the drawers can be converted to a 2 by 2 inch slide library. The cabinet is sturdily built of heavy gauge steel and finished in silver gray hammerloid. Jack C. Coffey Co., Dept. NS, 1124 Greenleaf Ave., Wilmette, Ill. (Key No. 480)

Extension Table

Of particular interest for home-making departments in schools, but also practical in dormitories and other residence quarters, is the new Porta-Bilt Extension Table Unit. This double-purpose unit provides a sturdy cabinet with storage areas and work top from which a table is pulled out for dining, serving or food preparation. The extension table has rubber casters and a simple mechanism which makes it easy to oper-

ate and makes the table quickly available when needed.

The cabinet is 36 inches wide and 24 inches deep. The table, which pulls



out at a height of 30 inches, can be extended as much as 58 inches beyond the face of the cabinet. It is 30½ inches wide. The unit is available in enamel or maple finish. Mutschler Brothers Company, Dept. NS, Nappanee, Ind. (Key No. 481)

Non-Skid Floor Finish

Skid-Not is a new colorless transparent plastic floor finish designed for use wherever a non-slippery, long-lasting floor finish is desired. It can be applied with a mop to form an attractive semi-gloss, non-glare, long-lasting finish. It

can be applied over varnished or enameled wood, rubber or asphalt tile, cork, terrazzo or magnesite floors. When floors that have been previously waxed or oiled are cleaned with Monroe Wax and Oil Remover, Skid-Not can be applied with satisfactory results. Rubber skid marks and traffic stains can be easily removed without damage to the finish. Skid-Not is especially adapted for use on gymnasium floors. The Monroe Co., Inc., Dept. NS, 10703 Quebec Ave., Cleveland 6, Ohio. (Key No. 482)

Universal Baseboard

The completely redesigned line of Kritzer Baseboard Heating equipment includes models to meet every requirement for institutional or industrial heating, either steam or hot water. A feature of the line is the full height, solid steel back plate which aligns the entire baseboard assembly, firmly supports all elements, and acts as a barrier against loss of heated air into walls while protecting wall surfaces from dust streaks. The new Kritzer slide cradle fits snugly to the fins and prevents movement of the coil unless necessary for realignment. The enclosure is easily assembled or removed for cleaning. Kritzer Radiant Coils, Inc., Dept. NS, 2901 Lawrence Ave., Chicago 25. (Key No. 483)

(Continued on page 164)

for little girls, too . . .

Moore Gym Suits!

The active younger set will fall head over heels for these cute, new Moore Gym Suits — and be pleased as punch to dress like their high school and college sisters. There's a style to meet all elementary needs regardless of dressing facilities.

The suit illustrated here might be the favorite dress of any little girl, and

has its own modest, matching inner-brief. It's only one of many colorful 1-piece suits, flared and pleated tunics, cuffed shorts, romper shorts, pullover or button blouses — all appropriate, all popularly priced. Send for the new Booklet E10, or request sample suits. Write today.



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25-34 Jackson Ave., Long Island City 1, N. Y.
1908 Beverly Blvd., Los Angeles 4, Calif.

—also makers of Caps and Gowns • Choral Gowns—

Note . . . the difference in this key available only with DUDLEY LOCKS

Just a quick glance will tell you that the Dudley Master-Key is different from any you've ever seen. And it's this difference that spells trouble-free locker operation for your school's master-keyed locker locks. Only Dudley offers you this exclusive key that is practically impossible for commercial key-makers to duplicate.

There's a lock in the complete Dudley line to meet your every locking requirement. Send for the free Dudley catalog and details of the Dudley Self-Financing plan.



F-570

Master-keyed combination with the SAFE Dudley key



S-540

Master-keyed locker lock with speedy reset key for changing combinations in a few seconds



RD-2

Rotating dial combination with Master-Chart Control

DUDLEY LOCK CORPORATION

DEPT. 510, CRYSTAL LAKE, ILLINOIS

The NATION'S SCHOOLS



Are these young eyes worth saving?

324

Eyes come one pair to a child. They are not expendable. The care and protection of these precious eyes is a first-line responsibility in our schools.

That's why classroom lighting must have your most critical attention.

There are many lighting fixtures on the market. Some cost more than Day-Brite, some cost less. None will give you better

lighting or a more practical, sensible long-term investment.

If you're concerned with lighting a new school or relighting an old one, we urge you to learn why hundreds and hundreds of schools, after careful comparison, turned to Day-Brite lighting.

Write today for information. Ask for Day-Brite School Bulletin OD-536.



Day-Brite Lighting, Inc., 5451 Bulwer Avenue, St. Louis 7, Missouri. In Canada: Amalgamated Electric Corp., Ltd., Toronto 6, Ontario.

What's New ...

Communication System

The new Executone School Communication System has been designed as a result of years of practical experience in working with school administrators. Decentralization is an important feature of the system. The intercom control and microphone are located in the principal's office but the large sound control rack can be located in a separate room for independent operation. The administrator's control station illustrated handles 44 classrooms. Larger and smaller capacity models are available to meet any school requirements.

Teachers are automatically notified when classrooms are contacted and they may answer from across the room if desired. Upon completion of a conversation there is nothing for the teacher to do as the system has an automatic reset. The multiple microphone network permits talks or announcements to be made from any location. Fire and other alarm systems, and time signals are all incorporated into the one system. Flexible switching permits selective program distribution to individual classrooms, groups of classrooms, auditorium, gymnasium or all locations simultaneously. Auditorium and gymnasium programs are amplified and there is provision to channel programs to overflow

audiences in classrooms. Intercom supersedes sound programs and program and alarm signals automatically supersede existing intercom conversation as well as sound programs with instant auto-



matic return to the original program. In addition to the new operating features, the new system provides natural voice clarity. Executone Inc., Dept. NS, 415 Lexington Ave., New York 17. (Key No. 484)

Rotary Card File

A new electrically-operated rotary card file is now available with finger-tip, push-button control. It is said to enable a clerk to select electrically any one of thousands of cards in less than three seconds. The file is divided into 16 sections. Each section is controlled by one of 16 push-buttons mounted on a panel board. When the proper button is pushed, the file instantly revolves and

automatically stops when the desired section is reached. The device revolves clockwise or counter-clockwise as required for quickest action. Mosler Safe Co., Dept. NS, Hamilton, Ohio. (Key No. 485)

Mineral Building Material

Zeprex, a Swedish development, is a versatile, light weight mineral building material for use in building superstructures, which can be sawed, drilled, cut with an axe and nailed like wood. It has been used in Europe as roof decking, walls, ceilings and floors in almost every type of building. It is now being introduced into this country and will be manufactured by United States Plywood Corporation.

Thickness of Zeprex varies from 2 to 10 inches, depending on the desired strength and insulation value. It is manufactured in slab form and comes in 20 inch width in lengths up to 18 feet. Zeprex is incombustible, has an oyster-white surface which may be left natural or decorated, and is suitable for use in arctic as well as tropical temperatures. Its unicellular construction makes Zeprex an excellent moisture barrier. United States Plywood Corp., Dept. NS, 55 W. 44th St., New York 36. (Key No. 486)

(Continued on page 168)

*"This film
fills a real need in
teaching community
government"*



© BACHRACH



... says John Day Larkin, Ph.D., Dean of Liberal Studies, Illinois Institute of Technology, who served as collaborator on the new Coronet film, *Community Governments: How They Function* (1½ reels).

"Our work has produced a film which will, I believe, help teachers immeasurably in the presentation of a difficult unit."

Yes, Dr. Larkin is one of the many outstanding American educators who has made sure that the teaching standards of Coronet films are constantly kept at their highest.

He knows—through experience—that Coronet research and production techniques are educationally sound . . . resulting in completely reliable 16mm films that are always correlated with the curriculum.

Other new Coronet releases, each produced under the supervision of a prominent educator, include:

- Robert E. Lee: A Background Study (1½ reels)
- Geography of the Middle Atlantic States (1 reel)
- Understanding our Earth: Soil (1 reel)
- First Aid: Fundamentals (1 reel)
- Working Safely in the Shop (1 reel)

Plan now to see exactly *why* Coronet films offer you so many more teaching values than other 16mm sound films . . . discover *why* you should make no compromise with films *almost as good*. For further preview, purchase or rental information on these—and 487 other—superior Coronet films, write today to:

Coronet Films

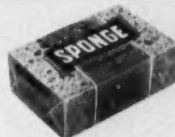
Dept. NS-553
Coronet Building, Chicago 1, Illinois

Better cleaning jobs at lower cost

with mops made of Du Pont Sponge Yarn



same material as



popular Du Pont Cellulose Sponges

These new mops do a better, neater all-around cleaning job . . . and they do it quicker! Made of the same tough, work-saving material as famous Du Pont Cellulose Sponges, they last longer than ordinary mops . . . save you money.

No wonder more and more institutions are finding it pays to use mops of Du Pont Sponge Yarn! Give them a trial . . . find out for yourself how they save you time and money. Ask your supplier for these modern mops today. For supplier in your area write: E. I. du Pont de Nemours & Co. (Inc.), Cellulose Sponge Section D, Wilmington 98, Delaware.

- Last longer—Sponge Yarn is tough!
- Make floor washing and damp-mopping neater
- Easier to use—wring out damp-dry
- Highly absorbent—won't leave flags
- Easier to clean—easily sterilized
- Resist tangling, souring—always hold shape



BETTER THINGS FOR BETTER LIVING
THROUGH CHEMISTRY

PERFECT FOR WAXING

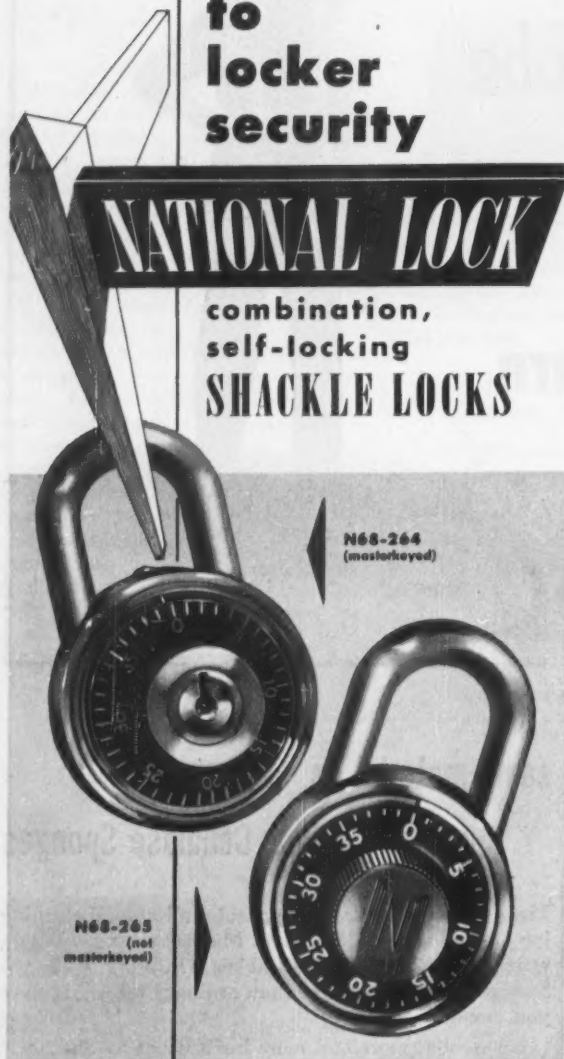


EVEN MORE SAVINGS! Sponge Yarn does a beautiful job applying wax . . . puts it on smoothly and evenly . . . leaves floors *just right* for buffing. And you use the same mop for waxing and wet-mopping—wax rinses out of sponge yarn quickly and easily.

**sure
route
to
locker
security**

NATIONAL LOCK

**combination,
self-locking
SHACKLE LOCKS**



For those who demand complete, long-lasting locker security, NATIONAL LOCK has the answer. Here are shackle locks built to the most exacting security standards...with double steel case, extra-strong shackle, 3-number dialing and sturdy construction throughout. See NATIONAL LOCK quality for yourself. Write today on your letterhead for free sample shackle lock.

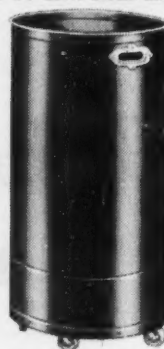


NATIONAL LOCK COMPANY
ROCKFORD, ILLINOIS • LOCK DIVISION

**tough
babies**

FIBEROK UTILITY CANS

For schools, colleges and institutions. A complete line of light, husky disposal units in high grade case-hardened FIBEROK. Utility cans have heavy steel tube and heavy gauge steel bottoms. Baskets have heavy steel tube top rings, steel bottoms and metal side seams. Straight or tapered. Your style and height... send for details.



"Fedco"

FIBRE BOX TRUCK

Vulcanized Fibre Side Walls. Compact, rugged, light yet durable! Sturdy support strips; reinforced hardwood bottoms; self-lubricating rubber casters; all sizes and styles made to specifications. Wonderfully maneuverable around schoolrooms and stock-rooms. Write for complete details.



Write

also for details of our complete line of light, strong TOTE BOXES

Federal FIBRE CORP.
Dept. 37
3704 Tenth Street,
Long Island City 1, N. Y.

Cut Your Dining Equipment Costs



with

BTC

Hostess

**FOLDING
BANQUET TABLES
& BENCHES**

Now—there's no reason to operate with inadequate dining facilities! Buy BTC Hostess Banquet tables—and inexpensive BTC Benches when your budget prevents the purchase of chairs.

These sturdy benches and tables are built for long years of use—feature an all-steel frame that's finished in handsome Taupe color. Legs fold two at a time for quick set-up and take-down. Table available with rich Plywood, smart Tauplon or colorful Formica top. Tables for 8 or 10 persons; benches seating 4 or 5.

FREE FOLDER Write for new, full-color folder showing complete line of Hostess Folding Benches and Banquet Tables.

THE BREWER-TITCHENER CORPORATION, Cortland, N.Y.

Everybody's Happy WITH

BUTLER

SCHOOL BUILDINGS

Are you wondering what in the world to do with this fall's enrollment? If you need more space for classrooms, gymnasium, workshop, assembly room, school bus garage or any type of auxiliary structure, you can solve the problem to everyone's satisfaction with Butler buildings!



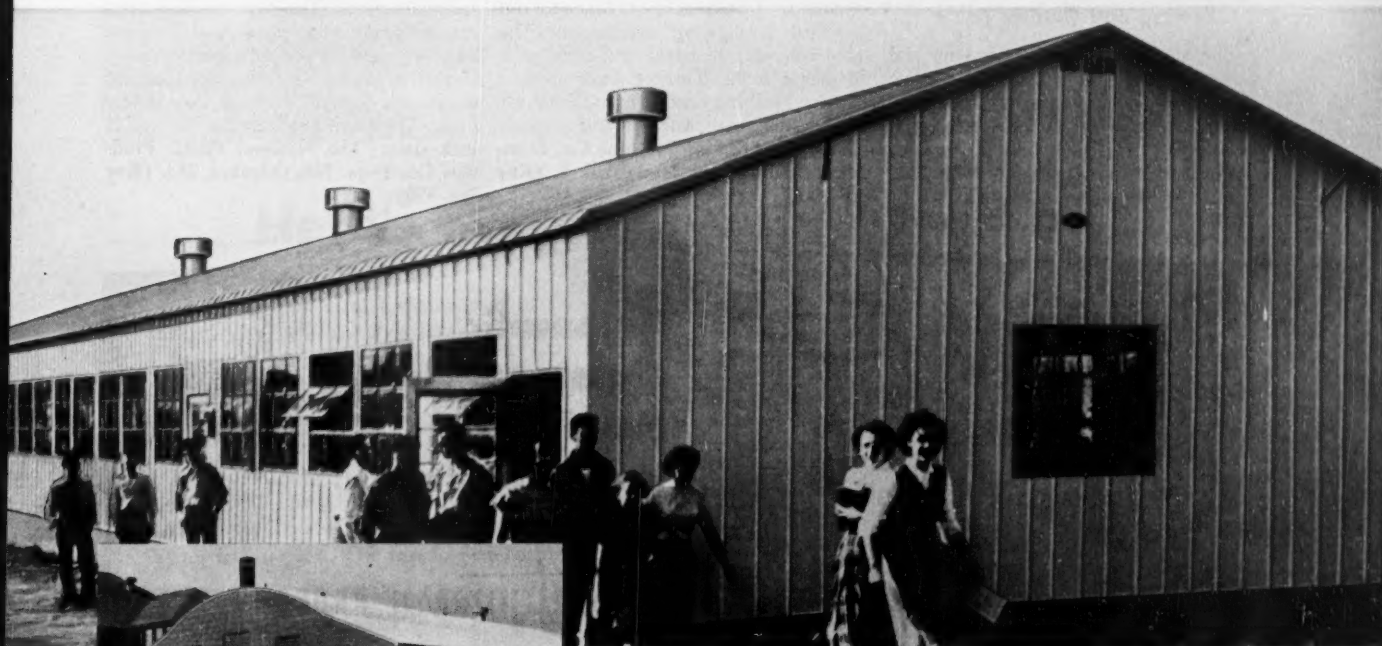
PUPILS will be happy to get out of the old, crowded classrooms into a light and spacious Butler building. Health and study conditions will be improved.



PARENTS will be reassured to know their children are housed in fire-safe, sanitary buildings of permanent steel construction. Butler buildings also offer today's maximum protection against destructive winds.

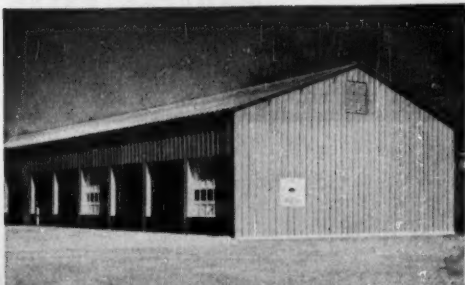


TAXPAYERS will be pleased because Butler buildings offer permanent, low-maintenance construction at savings to 50 percent, built in weeks instead of months!



Combination auditorium and gymnasium, a Butler building with brick walls at Suring, Wis.

School bus garage and shop. Butler buildings are adaptable to every school requirement.



High School music room, classroom and shop at Kohoka, Mo. This Butler rigid frame steel school building is 32 feet wide and 132 feet long, with 10 foot sidewalls.

Call a BUTLER Man to solve your building problem

Your Butler dealer will be glad to show you how Butler buildings have solved building problems like yours. Send the coupon TODAY!

Get MORE SPACE PER \$ with a BUTLER Building!

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For prompt reply, address office nearest you:

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- ☐ Send name of my nearest Butler dealer.
☐ Send information about Butler Steel Buildings for

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School _____

Address _____

City _____ Zone _____ State _____

What's New ...

Book Coating

Bookote is a transparent liquid plastic which can be sprayed directly onto book covers as a protection against moisture, stains, dirt and wear. It is easily applied, does not "bleed" inks used in printing book covers and dries quickly. Book life is extended by its use and titles and library markings on book backs are protected.

In addition to the spray type, Bookote is also available in brush type for heavy duty applications to reference books, dictionaries and other constantly used books. It is also effective in protecting light-colored fabric-embossed paper-bound books. It is available in smaller sized containers for individuals or teachers in the brush type and large sized containers for libraries. The spray type is available in a 12 ounce utility size. Delkote, Inc., Dept. NS, Wilmington 99, Del. (Key No. 487)

Sewing and Cutting Table

The Singer Combination Sewing and Cutting Table, designed to accommodate two students, is now available in a new blonde finish. The versatile table provides sewing machines for two students with ample working space for two more. When the machines are folded into the

table, it can be used for group discussions for other home-making or art classes. The blonde finish is designed to brighten



the classroom. The table has a laminated plastic top with a satin-finish surface which is immune to oil, inks, paints, common acids, flame and scratching.

Two plywood shields totally enclose and protect the sewing machine heads when folded into the table. The fitted inserts covering the table openings can be locked if desired. Four drawers are provided for sewing accessories. The table measures 42 by 60 inches in area, 30 inches high. Three different Singer Sewing Machine heads are available for the combination sewing and cutting table. Singer Sewing Machine Co., Dept. NS, 149 Broadway, New York 6. (Key No. 488)

One-Man Fire Engine

A one-man wheeled fire fighting unit for extinguishing large scale B and C fires is now available. The Dry Chemical Wheeled Engine has a capacity of 150 pounds and discharges free-flowing, quick smothering Alfco Dry Chemical. The unit has a discharge range of from 20 to 25 feet, enabling the operator to move up quickly on the fire. The unit is designed to be easily wheeled, maneuvered and operated by one man. It carries the inspection and approval label of Underwriters' Laboratories, with B and C classification, according to the manufacturer. American-LaFrance-Foamite Corp., Dept. NS, Elmira, N. Y. (Key No. 489)

Furniture Cushions

Combining sound-deadening with floor protection and easy moving of furniture, Gardettes are easily attached to chair and table legs. They are sturdily constructed of Wynene plastic and steel for long life and satisfactory performance. Gardettes have a flat base, thus helping to prevent dents in floors or floor coverings. They are available in ¾ and 1 inch sizes. The National Plastic Products Co., Dept. NS, Odenton, Md. (Key No. 490)

(Continued on page 172)

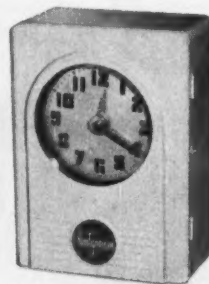


POTTER SLIDE
TYPE FIRE ESCAPE
in seconds instead
of minutes
MADE RESCUE POSSIBLE

Mothers, Fathers, Teachers and Principals realized that a precaution taken only six years before insured the irreplaceable lives of their dearest possessions. SAFEGUARDING occupants of SCHOOLS, HOSPITALS and ALL PUBLIC INSTITUTIONS is assurance of family comfort and happiness when protected by POTTER SLIDE TYPE FIRE ESCAPES. Over 9,000 in service on two to 34 story buildings, saving 44 sq. ft. of usable floor space on each floor instead of stair wells.

POTTER MFG. CORPORATION
6118 N. California Ave. CHICAGO 45, ILL.
For QUICK DETAILS, PHONE COLLECT (ROgers Park 4-0098)

Automatic Classroom Timing Need Not Be Expensive!



Montgomery PROGRAM TIMERS

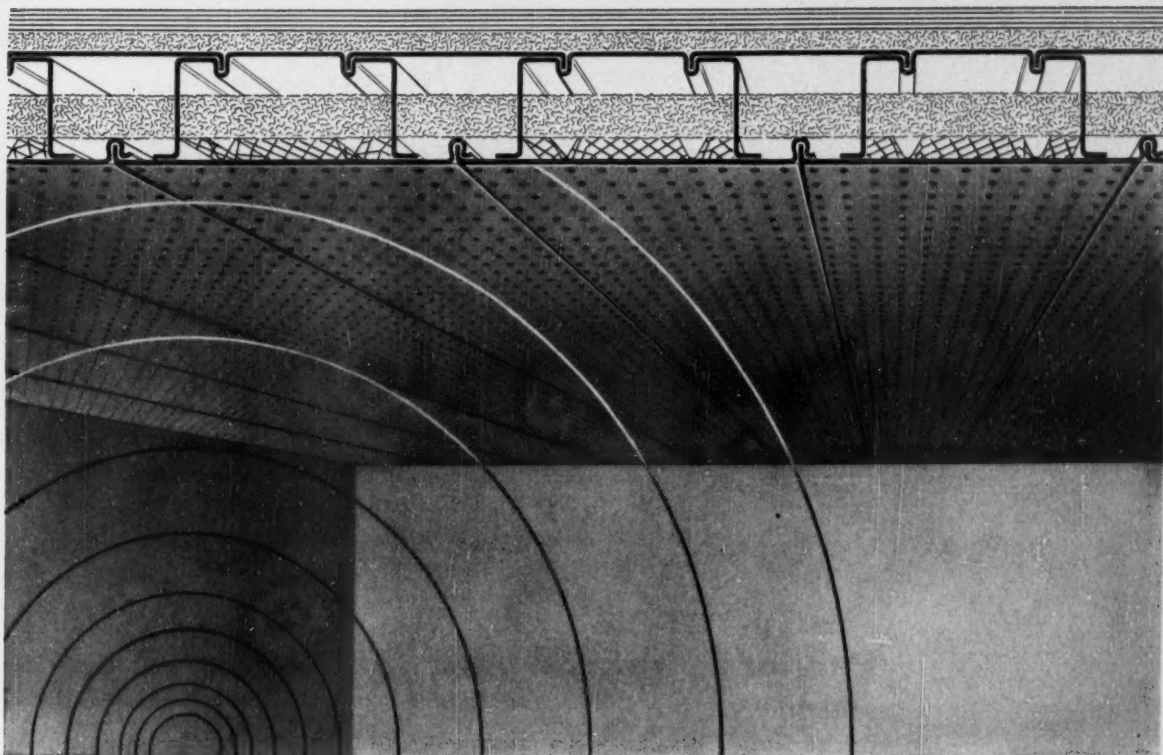
**Give Dependable Timing
At Small Cost!**

A Montgomery Clock, with necessary bells, buzzers, horns and transformer, may cost less than \$200.00. The clock alone costs as little as \$86.25. Your own school electrician can make the installation. Thousands of schools are finding Montgomery Program Clocks indispensable. You can set schedules easily, without tools. Choice of 12 or 24 hour program discs.

Write today for complete details, or ask your School Supplies Distributor.

**Montgomery MANUFACTURING
COMPANY**
OWENSVILLE 6, INDIANA

OVER 90% OF LOW COST PROGRAM TIMERS ARE MONTGOMERY



Here's noise-control . . . built in!

Here, the acoustical treatment is the *structural ceiling*—and the subfloor or roof above—saving time, labor, materials and money.

It's formed of Fenestra* Acoustical "AD" Metal Building Panels locked together side-by-side to form a tremendously strong, solid structure.

An "AD" Panel is a rigid metal box beam with a flat, smooth surface top and bottom and open space in between. The top surface forms the sub-

floor or roof deck. The perforated undersurface forms the ceiling. In the open space between is glass fibre insulation.

This new kind of acoustical ceiling is virtually indestructible. You can wash it or paint it without hurting its acoustical efficiency.

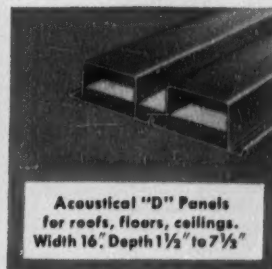
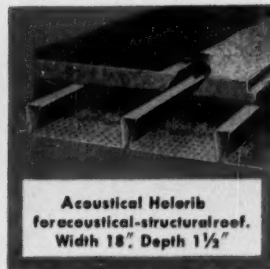
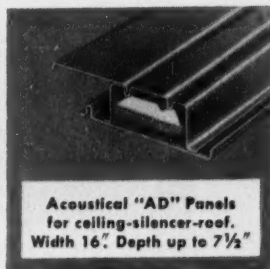
And it's *noncombustible*.

Write us for the whole money-saving story. Detroit Steel Products Company, Dept. NS-5, 3405 Griffin St., Detroit 11, Michigan.

*Trademark



METAL BUILDING PANELS





**Look
at the
Extras
You Get**

**...with NU-WOOD
Interior Finish!**

EXTRA BEAUTY... Nu-Wood interior finish comes in soft, fadeproof colors—or with a snow-white light-reflecting surface that actually grows brighter with age. Available in tile (acoustical or plain), plank or large panels, Nu-Wood is the modern background for stores, churches, schools and restaurants.

EXTRA PROTECTION... against high costs because Nu-Wood is quickly applied by a unique system that assures completely level ceiling and wall surfaces.

EXTRA VALUE . . . because Nu-Wood builds—insulates—hushes noise. Application is economical and easy—no muss or upset—"business-as-usual."

Find out why Nu-Wood is the first choice of expert buyers for commercial and institutional modernization—mail the coupon!

Nu-Wood * **DECORATES
BUILDS
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Balsam-Wool® Guaranteed Insulation
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I want to know more about Nu-Wood Insulating Interior Finish. Please mail literature.

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Address.....

City..... State.....

Please check:
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IRCO answers the need for

more durable

school furniture

Even if they come in "like a herd of elephants" — Virco School Furniture *can take it!* Frames of heavy gauge steel tubing, manufactured to strict specifications in our own tube mill, provide maximum strength and rigidity. Finishes are stain and mar resistant—remain smooth and beautiful through years of punishment. Safe from the student—every piece is safe for the student, too—no sharp corners, no snagging or tearing hazards. A triumph of functional modern design!



No. 108 Tablet
Arm Chair



2-Pupil
Table



Lift Lid
Chair Desk



Open Front
Desk



Lift Lid
Desk

- Crescent bracing for extra sturdiness.
- Curved back and saddle seat for correct posture control, made of eastern maple.
- 12" x 24" tablet arm of maple or plastic sheet.
- Legs equipped with rubber-cushion, noiseless steel glides.

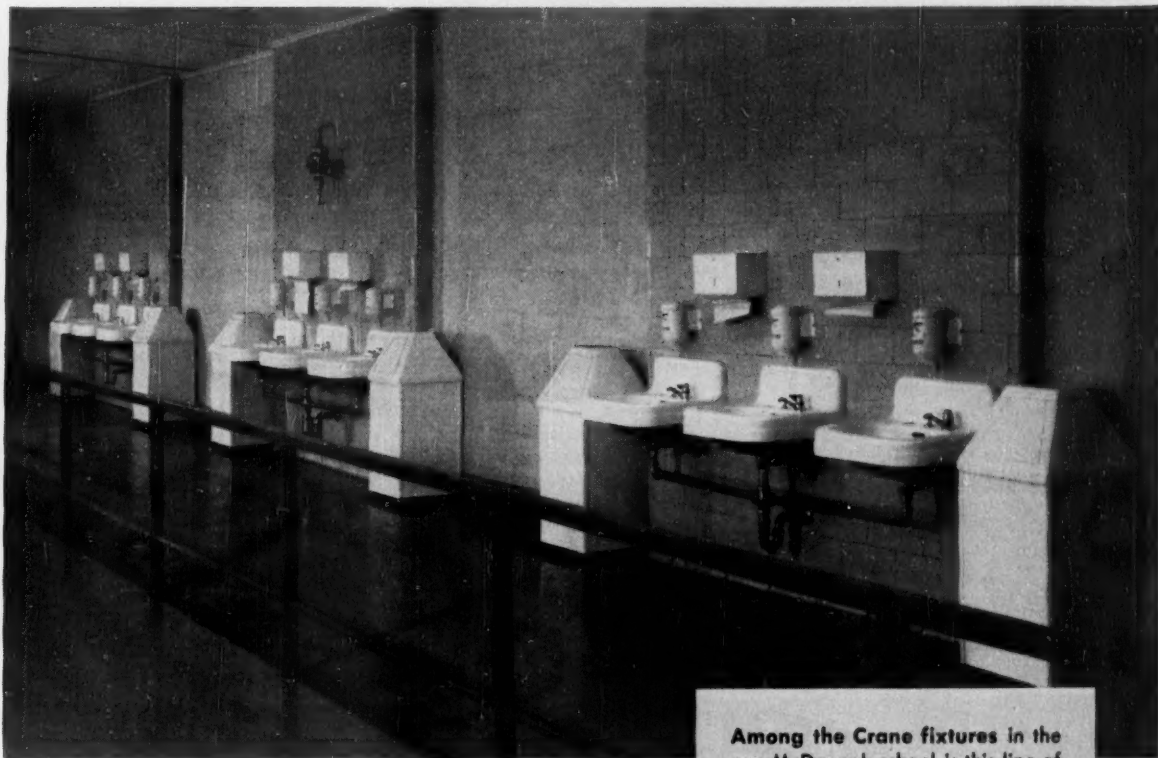
A complete catalog will gladly be sent on request. Please send us your specifications and bid forms. Choice of eastern maple or high density laminated plastic sheet on all desk surfaces.



MFG. CORPORATION
15134 South Vermont Ave.

Mailing Address: P.O. Box 846, Sta. H, Los Angeles 44, Calif.
Eastern Office: 11 West 42nd Street, New York City

Another picture of sound school planning



Among the Crane fixtures in the new McDonogh school is this line of Rhodile lavatories . . . conveniently placed so that students file past them as they enter the cafeteria.

Like other alert communities that have kept their eyes on the birth-rate charts, New Orleans, Louisiana, is taking measures to keep its school system abreast of today's—and tomorrow's—demands.

The city's latest move in this direction is represented by the recently-completed McDonogh Elementary School No. 39—a splendid example of modern school construction and Crane-equipped throughout.

Crane fixtures were chosen because their specialized school design and sound construction solve many important problems of space, maintenance, and cost—and because Crane is the name that means reliability and permanence in plumbing.

If you are planning new school construction or new facilities in present buildings, let your Architect and Plumbing Contractor know your preference for Crane.



McDonogh No. 39 Elementary School, New Orleans, Louisiana. Architects: Curtis & Davis, New Orleans; General Contractor: Farnsworth & Chambers, Houston; Plumbing Contractor: American Heating and Plumbing Co., New Orleans.

CRANE CO.

GENERAL OFFICES: 836 SOUTH MICHIGAN AVE., CHICAGO 5
VALVES • FITTINGS • PIPE
PLUMBING AND HEATING

What's New ...

Hard Gloss Floor Finish

Johnson's Heavy Duty Hard Gloss is a new self-polishing floor maintenance finish with high resistance to both scuffing and damp mopping. It has been developed especially for use on institutional and commercial floors where there is constant wear. It produces a hard, high gloss on rubber and asphalt tile, linoleums, vinyl and other plastic type flooring. It also provides a durable, bright shine on sealed wood and cork floors. The finish stands up under frequent wet moppings but can be easily removed with a good floor cleaner. It provides excellent traction underfoot while remaining hard and bright in appearance. **S. C. Johnson & Son, Inc., Dept. NS, Racine, Wis. (Key No. 491)**

Model WD-15 Vacuum Cleaner

A two stage turbine, powered by a $\frac{3}{4}$ h.p. universal type motor, both moisture proof and rubber mounted, picks up water, dirt and dust quickly and thoroughly in the new Model WD-15 wet-dry vacuum cleaner. The unit is easily portable with four free-running, ball-bearing swivel rubber casters. The water lift is 61 inches. The $8\frac{1}{2}$ gallon tank of heavy gauge steel is reinforced for strength and interior and exterior

are porcelain to prevent rust and corrosion. When the tank is filled to capacity, a newly developed positive action shut-off takes effect. A protective, non-mark-



ing rubber surrounds the base of the machine. **Clarke Sanding Machine Co., Dept. NS, Muskegon, Mich. (Key No. 492)**

Challenger Gas Range

The new Wolf Challenger is a gas range for volume cooking for medium-sized or smaller food serving needs. It may be installed flush to back wall and has one-piece high shelf and a beveled sill across the back which prevents grease from falling behind the cooking units. Features of the new range include heavy welded angle-iron frame, large top cook-

ing surface, porcelain enamel open top sections, large low temperature oven, non-clog open top burners, automatic safety oven lighting, 6 inch high adjustable legs for easy cleaning and extra strong counter-balanced oven doors. Legs are removable for curb or platform installation.

The range is available for use with natural, manufactured or bottled gas and comes in Japan black or stainless steel finish, single or double oven units and with a wide variety of top arrangements. **Wolf Range & Mfg. Co., Dept. NS, 5731 S. Alameda, Los Angeles 58, Calif. (Key No. 493)**

Plastic Curtains

Luxout plastic curtains for stages, windows and other darkening or dividing purposes are now available in attractive new designs as well as in plain colors. Made of Koroseal, Luxout curtains are fabricated by the Thermoseal process for smoothness and consistent durability and are constructed to allow an even, non-balking action along the traversing track. These plastic vinyl curtains provide light control wherever needed. The attractive new patterns available make them also effective for use as draperies. **Plastic Products, Dept. NS, Richmond, Va. (Key No. 494)**

(Continued on page 176)





Monroe Tables, built to last for years, offer multi-usefulness with built-in strength to do your job. Above: Deluxe No. 3 Table loaded with 2362 lbs. of cement. Below: same table after test showed no weakness. Both photos unretouched.



54 different sizes and types of folding tables for school cafeterias and class and lunch rooms.

Write for Catalog, Prices & Discounts

THE Monroe COMPANY

76 CHURCH STREET COLFAX, IOWA

*Cost-Cutting
Labor-Savers!*



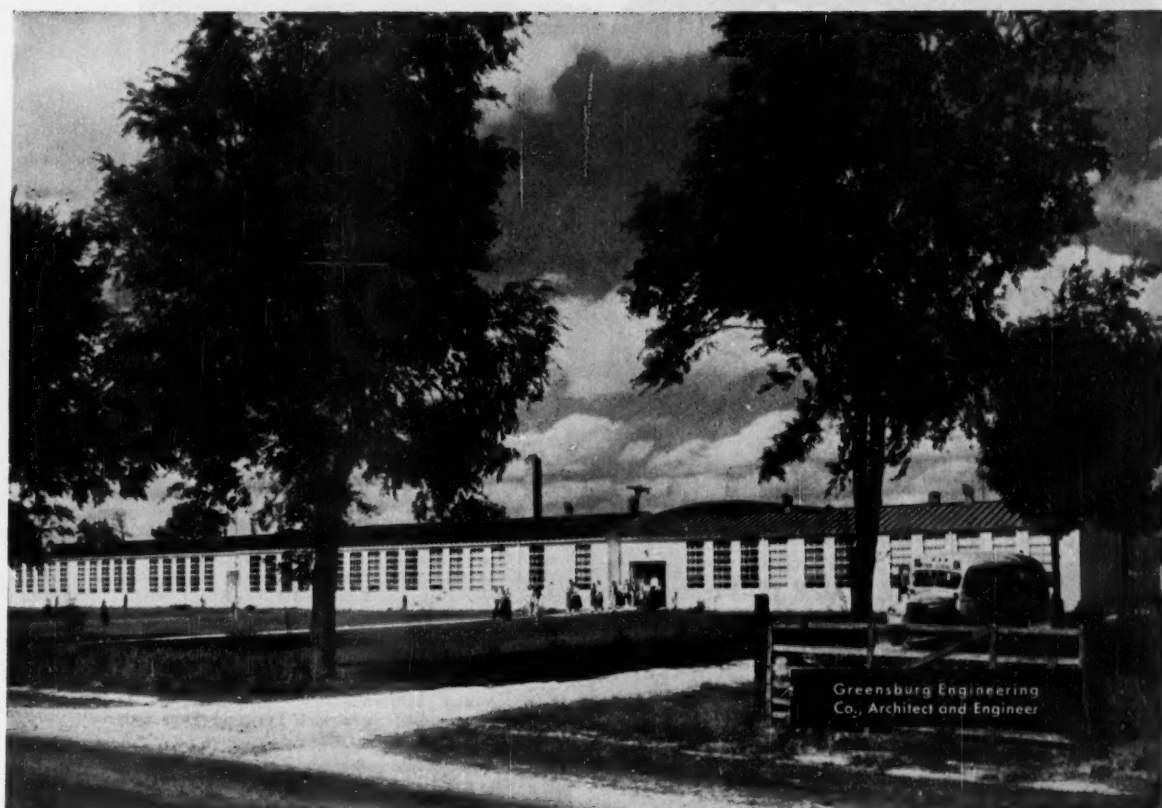
**Famous LAKESIDE
Stainless Steel CARTS**

Add new speed and efficiency to your cafeteria service—improve your hot lunch program with LAKESIDE Carts and Pans. See your jobber or write for folder on complete line and dealer's name today. Prices shown are FOB Milwaukee.

Model 311 (left) . . \$28.50 Model 322 (right) . . \$35.00

LAKESIDE MFG.CO.

1983 S. Allis Street, Milwaukee 7, Wisconsin



The budget said “no” but STEELOX said “yes”

This Indiana school might not be in operation today if it hadn't been for Armco Steel Buildings of STEELOX construction.

Basic problem was that of cost. The limited budget available for the proposed school seemed inadequate to meet community requirements. They wanted an efficient, attractive building that would be safe, comfortable and easy to maintain. Many types of building construction were investigated and found too costly—until Armco Steel Buildings were considered.

It was pointed out that the unique STEELOX Panels provide both struc-

tural support and finished surface in a single unit. This would effect considerable savings in sidewalls and roof. Yet the interior finish, equipment and facilities could be the same as in any other building.

Ease and economy of erection was another point. In other communities similar jobs had been completed in a few weeks by local contractors.

How about maintenance and safety? Because there is nothing to crack, warp or rot in Armco Buildings, maintenance costs are low. And being of all-steel construction these buildings are fire-resistant and easily made

lightning-safe. So Armco Steel Buildings got the job.

WHAT ABOUT COST?

This completed 12-room school building, designed for 350 students, cost only \$8.40 per square foot. Classrooms were built on the basis of 18 square feet for each student.

You, too, may find Armco Buildings are the economical solution to your school problems. Let us discuss specific requirements with you or your architect. Write us, Armco Drainage & Metal Products, Inc., 1363 Curtis Street, Middletown, Ohio. Subsidiary of Armco Steel Corporation.



Ample classroom space



Wide, well-lighted hall

ARMCO
STEEL
BUILDINGS



W. C. DEVRY

NEW DEALER TRADE-IN PLAN ANNOUNCED BY W. C. DEVRY

"Army-Navy engineers, collaborating with DeVry technicians, made possible DeVry's mighty JAN," said W. C. DeVry, president of the DeVry Corporation of Chicago. More than 10,000 JANS have been ordered for instructional and entertainment purposes by the Armed Forces.

This modern marvel of the 16 mm. motion picture projection field, because of its unparalleled sound, picture qualities, and other exclusive features, is the ideal unit for use in all branches of education.

Have your DeVry dealer give you a free demonstration at your convenience—or mail coupon below for full facts today! Also get full information on the smart DeVrylite "5".

USE LIBERAL TRADE-IN PLAN

Take advantage of your DeVry dealer's new, remarkable trade-in plan which permits you to apply the present market price of used sound or silent movie projectors against the purchase price on all new DeVry equipment.

OVER 10,000 JANS ORDERED BY ARMY-NAVY

Free! MAIL COUPON FOR
FULL FACTS ON JAN
AND TRADE-IN PLAN!

MR. W. C. DEVRY, President
DEVRY CORPORATION
1111 Armitage Avenue
Chicago 14, Illinois

Please send me full facts, without obligation, on:

- ☐ 1. DeVry JAN projector.
- ☐ 2. Liberal trade-in plan.
- ☐ 3. DeVrylite "5."

Name _____

Address _____

City _____ Zone _____ State _____

(N55-53)



More people every
day are saying...
"As hard as you
try, you can't beat
DeVry."

DEVRY
Corporation
1111 ARMITAGE AVENUE
Chicago 14, Illinois



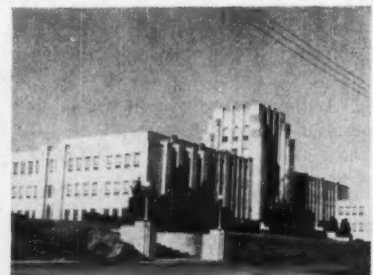
Ample leg room at both ends and sides of table. A brace at each leg for extra strength—a leg at each corner for engineering balance. All steel chassis riveted (not screwed) to a complete $\frac{3}{8}$ " Plywood top (not just a frame) for extra ruggedness, with $\frac{1}{16}$ " Formica, $\frac{1}{8}$ " Masonite Tempered Presdwood or $\frac{1}{8}$ " Linoleum glued to Plywood, giving a smooth, hard, durable surface with no rivets showing. Metal molding around edge. Table folds to $2\frac{1}{2}$ ".

Standard sizes 30" x 72" and 30" x 96".
Standard heights 30" and 29"—lower for
young children.

Note—also comes with Plywood Tops only.
If It Folds—Ask Howe

HOWE FOLDING FURNITURE, Inc.
1 PARK AVENUE NEW YORK, N. Y.

Repair
Weather
Damage
NOW



... before it's too late!

LET WESTERN WATERPROOFING COMPANY RENEW YOUR SCHOOL THIS YEAR

A "stitch in time" will save money...so restore your school to its original strength and beauty during 1953.

Western is the largest operator in its field. All work done under contract, fully insured and guaranteed.

Write for a consultation with our field engineer.

- TUCKPOINTING • BUILDING CLEANING
 - CONCRETE RESTORATION • SUB-SURFACE WATER PROTECTION
- (No Material For Sale)



If you are building,
enlarging
or modernizing—
you'll find
it pays to
specify **LYON**

- LOCKERS
- FOLDING CHAIRS
- STORAGE CABINETS
- FILE CABINETS
- WORK BENCHES
- DRAWING TABLES
- KITCHEN CABINETS

FACTORIES IN... AURORA, ILL., AND YORK, PA.

LYON METAL PRODUCTS, INCORPORATED

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LYON[®]

STEEL EQUIPMENT

FOR SCHOOLS



A PARTIAL LIST OF LYON STANDARD PRODUCTS

• Shelving	• Kitchen Cabinets	• Tool Toters	• Economy Locker Racks	• Display Equipment	• Filing Cabinets	• Service Carts	• Tool Stands
• Lockers	• Cabinet Benches	• Bar Racks	• New Freedom Kitchens	• Flat Drawer Files	• Folding Chairs	• Sorting Files	• Shop Boxes
• Stools	• Storage Cabinets	• Tool Boxes	• Toolroom Equipment	• Revolving Bins	• Work Benches	• Drawer Units	• Tool Trays
• Bin Units	• Drawing Tables	• Parts Cases	• Wood Working Benches	• Hanging Cabinets	• Bench Drawers	• Hopper Bins	• Shop Desks

What's New ...

Fiberglas Ceiling Board

A new sound control ceiling is offered in non-combustible Fiberglas Sonofaced ceiling board. The board, measuring 24 by 48 inches and 3/4 inch thick, is faced with plastic film. It controls noise, is easy to clean, has high light reflection qualities and provides efficient insulation. The film facing transmits sound by diaphragmatic action into the air spaces formed by the intertwining fibers of glass.

The Fiberglas boards are suspended by means of a simple system of exposed metal sections which form a supporting grid. They can be arranged in various patterns. Any of the boards may be removed from below the ceiling, providing easy accessibility to the area above. The new board is available in white, slate blue, sea green, chartreuse, beige and coral. Owens-Corning Fiberglas Corp., Dept. NS, Toledo 1, Ohio. (Key No. 495)

Hearing Amplifier

Especially designed for hard-of-hearing children, the AMBCO Portable Hearing Amplifier offers improved frequency range and quiet operation. Surface and background noises are reduced to a minimum with the amplifier which has been accepted by the American Medical Association.

It helps borderline cases whose hearing is not seriously impaired to adjust to the small wearable hearing aids.

The amplifier was developed at the request of Mrs. Vivian S. Lynndelle, Consultant in Education of Hard of Hearing in California. It is especially useful for auditory training of students with hearing problems. The AMBCO is finished in pearl gray hammertone enamel and weighs slightly over two pounds, including batteries. A. M. Brooks Co., Dept. NS, 1222 W. Washington Blvd., Los Angeles 7, Calif. (Key No. 496)



sultant in Education of Hard of Hearing in California. It is especially useful for auditory training of students with hearing problems. The AMBCO is finished in pearl gray hammertone enamel and weighs slightly over two pounds, including batteries. A. M. Brooks Co., Dept. NS, 1222 W. Washington Blvd., Los Angeles 7, Calif. (Key No. 496)

Loudspeaker

A new idea in high-fidelity loudspeakers is offered in the new Ultrasonic Model U-24. Incorporating the Baruch-Lang System, the low priced speaker embodies the high fidelity characteristics

(Continued on page 180)

of "big-speaker" types without high cost and large space requirements, according to the manufacturer. The unit is complete in a blond or mahogany cabinet, ready for immediate attachment. Its clear-cut sound dispersal qualities and projection tendencies make it well adapted for school and college public address systems requiring high fidelity response. Ultrasonic Corp., Dept. NS, 61 Rogers St., Cambridge 42, Mass. (Key No. 497)

Kentflex Vinyl Tile

Kentflex is a new multi-purpose vinyl asbestos tile which is greaseproof, alkali-proof, fire resistant and resistant to acids, cooking fats, oils and gasoline. It is easy to install, being laid tile by tile, and can be safely installed on concrete in direct contact with the earth. It can be assembled in any desired patterns and is available in fourteen colors. Since the colors go all the way through the tile, they do not fade or wear off.

The tile is strong, tough and flexible, is made to withstand heavy traffic and to resist indentations. It comes in 9 inch square tiles and in feature strip as well as Flexobase, to be applied where wall meets floor to seal off the joint. Kentile, Inc., Dept. NS, 72 Second Ave., Brooklyn 15, N. Y. (Key No. 498)

Vallen CURTAIN CONTROLS AND TRACKS

TRIPLE THE LIFE OF CURTAINS AND EQUIPMENT WITH THE VALLEN JUNIOR

- Noiseless, Compact, Safe
- Simple to install
- Controlled by Vallen's exclusive one-button Start, Stop and Reverse Control
- Allows manual operation

WE'RE HEADQUARTERS FOR
YOUR PROBLEMS

There is a Vallen
Electric Control
and Track for every
need.



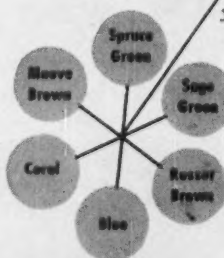
VALLEN JUNIOR

VALLEN, INC. AKRON 4, OHIO

IN SCHOOL MODERNIZATION PLANNING

Son-Nel color CHALKBOARDS

Harmonizing SON-NEL Chalkboards are in fade-proof color scientifically selected to offer optimum reflective legibility without glare. Investigate and you'll realize why architects of award-winning schools in 1952 — as in 1951 — specified eye-pleasing, eye-easing colored Chalkboards by SON-NEL.



Ask your architect,
your supplier... or write for
detailed information,
prices and color samples.



SON-NEL MANUFACTURING CO.
10222 PEARMAIN STREET
OAKLAND 3, CALIFORNIA
Dealerships Available



A new Burroughs to simplify complicated figuring jobs

Burroughs Multiple-Total Adding-Subtractor

Meet just about the most versatile partner any office ever had—ready and able to perform a variety of figuring functions with a high degree of efficiency.

This new Burroughs has two accumulating registers. It can add and subtract, directly, in either or both. It accumulates individual group totals and the grand total simultaneously, without recapping.

What's more, the exclusive Burroughs alternating register control enables the machine to store successive amounts alternately in the two registers, automatically. And each

transaction is fully identified by easy-to-read symbols.

Compact, light, and styled in the modern manner, the new Burroughs with Multiple Totals and Direct Subtraction crowns the efforts of five years' research. Available in 10-column and 13-column models, with wide or narrow carriage.

Find out how much it can do to simplify your work. Call the Burroughs office near you—listed in the yellow pages of your telephone directory. Or write Burroughs Adding Machine Company, Detroit 32, Michigan.

WHEREVER THERE'S BUSINESS THERE'S

Burroughs



LOST AND FOUND

LOST... Several School Kitchens and Cafeterias

FOUND... NACO Portable Electric Food Cart with Full-Course Meals for 300 Hungry Students

SAVED... Thousands of Important School-Budget Dollars



Detachable insulated cover used when cart is in transport.

Kitchens and cafeterias are no longer necessary in today's modern school. One central school kitchen prepares meals for all the other schools at much lower cost... sends them back by truck in the NACO Portable Cart. Just plug NACO in an electric outlet and serve... right in the gymnasium or auditorium. About 300 Oven-Hot meals are kept in three, insulated, "hot compartments." Salads and other "cool foods" may be refrigerated with ice, dry ice, or kept at room temperature. Holds 18 serving pans or 18 fireless cooker pans in hot section and 6 pans in cool section. NACO Portable Cart is designed to fit into a serving line.

Write for full information and cost analysis of this plan and names of schools now successfully using NACO Carts.

NACO PORTABLE FOOD CARTS...

Lower costs
Hot meals
Dry heat
Less food waste
Insulated sections
Special "cool" section

200 meal capacity
Easy to clean
Less Maintenance expense
Portability—just roll in
No special wiring
Sectional heat regulators

ATLAS Division

National Cornice Works
1323 Channing St. • Los Angeles 21, Calif.
Export Division: 301 Clay St., San Francisco, Calif.



TO INSPIRE

Student Precision!



Preferred by instructors because they inspire students to new achievements... WESTON instruments also are the choice of practical administrators because their ruggedness and year after year dependability make their cost remarkably low! Ask for bulletin listing all instruments.

WESTON Electrical Instrument Corporation,
614 Frelinghuysen Avenue, Newark

For Advanced Requirements MODEL 622



Ultra sensitive instruments of the double pivoted type requiring no leveling when used in horizontal position. Combine high accuracy and a 6.1 inch scale... ideal for precise measurements of potential and current at very low energy levels. Available as d-c voltmeters, millivoltmeters, milliammeters and microammeters; electrolysis volt-millivoltmeters and high resistance voltmeters—also as a-c rectifier type instruments and as thermocouple ammeters, milliammeters and voltmeters.

For Electrical Machinery Labs MODEL 633

A clamp-on volt-ammeter built to Weston standards of safety, accuracy and dependability. Five full scale a-c current ranges of 1000/250/100/25/10 amperes with range overlap. Three self-contained a-c voltage ranges of 700/350/175 volts—insulated for 750 volts. Has convenient 6 position switch easily operated by thumb—adjustable pointer stop facilitates measuring starting current of motors.



WESTON



Instruments

THE NATION'S SCHOOLS

When you design your new school or remodel your present building to increase capacity... Make space serve double duty

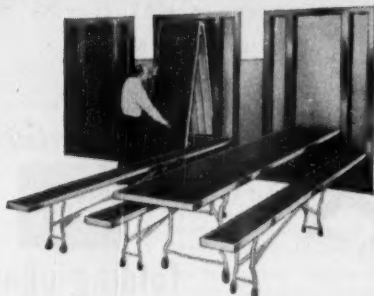
SCHIEBER NOW OFFERS FOLDING TABLES and BENCHES IN 2 STYLES

Choose the one that best suits your budget
and special requirements

ALL-STEEL CONSTRUCTION

In-wall

RIGIDLY ATTACHED TO WALL POCKETS



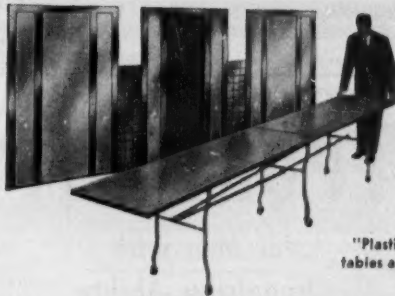
Here is genuine quality that has stood the test of time. Since 1937, more than 500 architects have specified thousands of these units in schools from coast to coast. With full knowledge of the rugged use they receive Schieber puts into their construction the best in workmanship and materials. Sound policy? Schieber IN-WALL users have no service problem.

Unless you foresee the need of detaching tables and benches from the wall, specify IN-WALL and get the extra rigidity and quality it offers as compared with detachable units.

PLYWOOD TOPS—STEEL LEGS

Port-a-Fold

DETACHABLE FROM WALL POCKETS



"Plastic Surfaced
tables and benches"

This is a low cost, plywood top, version of IN-WALL, yet many of the important quality features of IN-WALL are incorporated in its design. With 15 years experience building folding tables and benches, Schieber knows exactly where strength is needed. No castings are used in Port-A-Fold and reinforcements are provided where necessary to absorb the abuse of daily operation.

If conditions require various seating arrangements or your budget is restricted, specify this unit.

If you are planning a new school or modernization of an existing building, consult SWEET'S file or write for these two catalogs and get complete details on both Schieber units. Then choose the type that best suits your needs.



SCHIEBER SALES COMPANY DETROIT 23, MICHIGAN

a name that
has always stood
for highest quality
in folding table
and bench
equipment.

What's New ...

Institutional Incinerators



Two new models of the Wincinerator have been announced for institutional and commercial use. These new incinerators are the C-10 with a ten bushel capacity (illustrated) and the C-15 with a fifteen bushel capacity. They are designed to handle wet or dry refuse and are available for a choice of fuel and with special controls. Combustion is complete and practically all smoke and odors can be eliminated through forced draft, a special ventilating system and secondary combustion.

Oversize feed doors facilitate disposing of refuse. The incinerators are easily installed and are equipped with safety devices. Winnen Incinerator Co., Dept. NS, Bedford, Ohio. (Key No. 499)

Automatic Door Control

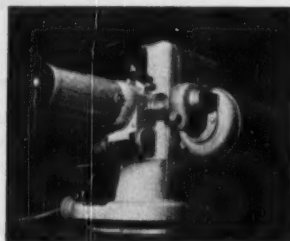
A newly designed, electrically operated hydraulic door control has been introduced. Known as the "Invisible Dor-Man" the unit opens any type of door automatically through a control mechanism concealed in the floor. Concealed under a carpet leading through the doorway, the mechanism opens the door as soon as one steps on the carpet. The door remains open until the person has walked through, then closes with a two-speed action. The initial closing speed is greatly reduced during the last few inches of closing to assure noiseless operation. Speeds can be adjusted at time of installation depending upon the amount and kind of traffic using the door.

The unit is easily installed and maintained and is economical in price. The hydraulic power unit can be hidden from view at any distance from the door. The electric cord is simply plugged into any standard circuit.

Safety features includes mechanism to prevent a door from opening when anyone is standing on the opposite side of the doorway. In case of power failure the door can be operated manually without locking or jamming. Dor-O-Matic Division of Republic Industries, Inc., Dept. NS, 4446 N. Knox Ave., Chicago 30. (Key No. 500)

Controlled Reader

Designed to assist teachers of reading at all levels of instruction, the new Controlled Reader features left-to-right control. It provides a moving slot which exposes projected printed material in a continuous manner at speeds varying from 45 to 900 words per minute. With the instrument the teacher has more positive control over the total reading activity, developing both the mechanical and interpretive phases simultaneously. The student is encouraged to increase the amount of material he can perceive and assimilate per unit of time and learns to encompass more at each fixation or eye stop. Reading selections are photographed on 35 mm film and



are small enough to store in film-strip cans. Educational Developmental Laboratories, Dept. NS, 33 Sunset Lane, Levittown, N. Y. (Key No. 501)

(Continued on page 184)

OPPORTUNITY

for Men with Organizing Ability

World's largest firm of church fund-raising canvass directors has several openings on its well-paid staff. Organizing ability is basic and imperative. Also required are a record that will stand up under examination, willingness to accept assignments any place in the United States and Canada, to be away from home most of ten months a year, and to work twice as hard as you have ever been required before. You will be trained from scratch, and work under supervision for a year or two. A position on our staff is not easily secured, but it is now two years since a Wells' director has resigned for any reason.

Personnel Department

WELLS ORGANIZATIONS

Church Fund-Raising Specialists
222 N. WELLS ST., CHICAGO 6



perfect balance

virco

folding chairs



This sturdy chair won't tip over! Durable tubular steel frame and formed plywood seat assure years of service. Fully enclosed hinges prevent pinching, snagging. Contoured for maximum comfort, lightweight for easy handling. Folds smoothly, stacks compactly. Also available in all-metal and with upholstered seats. Write for free catalog.

Dealers Note: Some areas still available for qualified dealers. Write for information.



IRCO MFG. CORPORATION
15134 SOUTH VERMONT AVE.

MAILING ADDRESS: P.O. Box 846, Station H, Los Angeles 44, California

HERRICK

STAINLESS STEEL REFRIGERATORS

Performance-Proved

at the new \$1,000,000 addition to

ARLINGTON HEIGHTS HIGH SCHOOL

Arlington Heights, Illinois

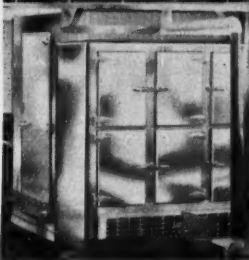


At left is an exterior view of Arlington Heights High School's new million-dollar addition.

Directly below is an interior view showing the serving center of the new cafeteria.

Architect for the new addition was Carl M. Teutsch, Chicago, Ill.

Superintendent of the school is LeRoy J. Knoepfel.



At left are two HERRICK units serving the high school's new kitchen... a HERRICK Stainless Steel Exterior, Porcelain Lined, Self-Contained Reach-In Refrigerator and a HERRICK Walk-In Cooler.

Herrick units were supplied by the Illinois Range Co., Mount Prospect, Ill.

Housing an extra-large, modern cafeteria with a seating capacity of 800 people, Arlington Heights High School's new million-dollar addition makes that institution one of the best equipped in the country. It is practically self-sufficient, having its own laundry, bakery and a kitchen staffed with five employees. • Serving this kitchen is a HERRICK Stainless Steel Reach-In Refrigerator Model SP644B and a HERRICK Walk-In Cooler Model WP766. These HERRICK units assure complete food conditioning day in and day out. For thoroughly dependable performance, convenience and trouble-free service, HERRICK is unsurpassed. Write for name of nearest HERRICK supplier.

HERRICK REFRIGERATOR CO., WATERLOO, IOWA
DEPT. N. COMMERCIAL REFRIGERATOR DIVISION

HERRICK

The Aristocrat of Refrigerators



UNEQUALED in APPEARANCE, DURABILITY and STRENGTH

Mitchell
FOLD-O-LEG tables

Convert any room into a Banquet or Group Activity Room... Set up or clear in minutes
QUICKLY FOLD or UNFOLD for Changing Room Uses



MAXIMUM SEATING

MINIMUM STORAGE



TOPS OF MASONITE, PRESWOOD, FIR & BIRCH, PLYWOOD, LINOLEUM, RESILYTE PLASTICS

TUBULAR STEEL LEGS

THE STRONGEST, HANDIEST FOLDING TABLE MADE!

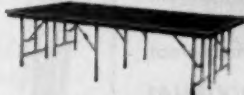
Mitchell
PORTABLE

FOLDING STANDS

EASY TO SET-UP ON or OFF STAGE



RIGID, SAFE for BAND ORCHESTRA CHORAL & DRAMATIC GROUPS



LEGS FOLD UNDER FOR MINIMUM STORAGE

STACK IN SMALL SPACE

SAVE TIME & LABOR

IMPROVE APPEARANCE AND PERFORMANCE

Better Acoustics and Discipline, Easier control of group by Director. Available in 1, 2, 3 or 4 elevations. Easy to handle units with strong 4" x 8" Fir plywood tops and rigid tubular steel legs. Band stand shown stores in a space only 4' x 8' x 6' high.

Write for Descriptive Folders

MITCHELL MFG. COMPANY

2734 S. 34TH STREET • MILWAUKEE 46, WIS.

MANUFACTURERS OF

MITCHELL FOLDING TABLES, BAND AND CHORAL STANDS

BE BRIGHT with

Colorbrite

the
Feather touch
lead



Feather touch lead

...assures brilliant color without bearing down. "Excellent for records and correcting papers."

makes easier reading

...on colored paper, under fluorescent light—makes no difference! Colorbrite proved easier to read.

and it's Guaranteed

Patented Elastic Lead Guaranteed not to break in normal use. AND—Colorbrite is smearproof—wetproof—fadeproof.

AVAILABLE IN 24 INDIVIDUAL COLORS OR SETS OF 12 AND 24.

EBERHARD FABER

since 1849

MOONCLINCHED EBERHARD FABER

Colorbrite

RED 2126



Remove Paint and Varnish Like Magic

STRIP-IT is the name of Churchill's revolutionary new product that removes all coats of paint or varnish like magic. Just apply with a lamb's wool applicator or brush, let stand a few minutes; then remove flaky residue with steel wire brush on floor machine, and the natural surface is clean... ready for refinishing. No washing, neutralizing, scraping or sanding... and repeated application is seldom necessary. Equally effective on horizontal or vertical surfaces... on floors, woodwork, desks, chairs or tables. Harmless to any natural surface. Non-inflammable.

Perfect Finish for Asphalt Tile

Developed especially for asphalt and rubber tile floors, but equally effective on other materials, Churchill's new VER-SEAL penetrates deeply, seals the pores and dries to a hard, resilient finish. It does not soften, damage or curl asphalt tile, and absolutely prevents color bleeding. Makes floors highly resistant to heavy foot traffic. It is also grease-proof... assuring complete protection of floors in kitchens, lunch-rooms, cafeterias, etc. Dries thoroughly, ready for use, in 20 minutes... and is ready for further treatment in just 12 hours. A time-saver!

Maximum Waxed Floor Protection

All protective sealers last two or three times longer when topped with Churchill's ALADDIN Self-Polishing Wax. This forms a hard, transparent film which holds dirt and grit on the surface... prevents wear on the surface underneath. No polishing is needed. Merely apply a thin coat with a wool applicator and allow to dry. Lustre will increase as a result of sweeping and normal traffic. ALADDIN Wax need not be removed before cleaning or rewaxing. Lap marks will not show when traffic lanes are "patch waxed". It's non-slippery and will not spot, smear, track or mark.

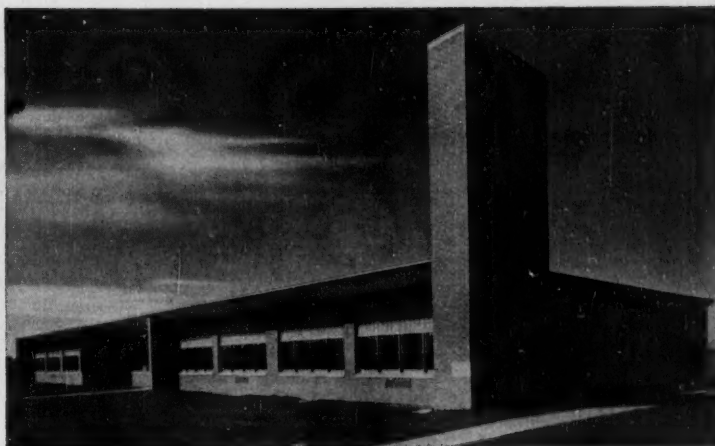
Try these superior products once, and they will always be on your list of "necessary supplies". Call your Churchill distributor or representative, or write...

CHURCHILL MANUFACTURING COMPANY
GALESBURG, ILLINOIS
FOR SUPERIOR FLOOR AND BUILDING MAINTENANCE MATERIALS AND TOOLS

Adaptable, Economical



The ORIGINAL Tubular
Steel School Furniture



Furniture as functional as the new St. KEVIN'S PARISH SCHOOL DESIGN



Shown is one of the eight classrooms typical of the up-to-date planning which provides maximum light without glare. Functional as well as pleasant for student activities, this room is equipped with Heywood-Wakefield S 501 LL Movable Desk and Chair Units. Providing ample storage room for books and materials, these tubular steel units assure permanently correct seat-desk relationship. For further information on this practical, economical furniture, write today for the fully illustrated catalogue of Heywood-Wakefield School Furniture.

This handsome new modern school is the most recent addition to the building program of Saint Kevin's Parish, Minneapolis, Minnesota. Under the supervision of Reverend James R. Coleman, Pastor, it was designed to meet present needs and the future expansion of this growing parish. Simple and contemporary in line, this one-story structure has many unusual features that make it particularly suitable for a cold Northern climate. Shifflet, Backstrom & Carter, Minneapolis, were the architects; installation of Heywood-Wakefield furniture was arranged by Farnham Stationery and School Supply Co., Minneapolis, Minn., distributors for Heywood-Wakefield Company. Heywood-Wakefield—School Furniture Division—Menominee, Michigan—Gardner, Mass.



What's New...

Composition Dish Box

Improved synthetic composition is used in the new Olson dish boxes. The exceptionally tough composition is re-



sistant to 180 degree temperature for sterilizing and resists bumps and abrasions. The box is formed in one piece without seams and is quiet, light weight, durable and easily cleaned. A rolled edge provides a hand grip all around the box. Boxes are gray composition and are offered in two standard sizes: 13 1/4 by 17 1/4 inches and 15 1/4 by 20 1/4 inches, both 5 inches high. Samuel Olson Mfg. Co., Dept. NS, 2433 Bloomington Ave., Chicago 47. (Key No. 502)

full length of the door at the door jamb, completely sealing off the danger area from top to bottom. It is essentially a flexible plastic stripping which is fastened to the door and the door frame with aluminum anchor moldings. It is securely held in place without interfering with the opening and closing of the door.

Stan-Guard can be installed on virtually any hinge or pivot-hung door and is suitable for use on manually operated or automatic doors, wood or metal construction. It is available in a variety of widths to fit the requirements of individual installations. Made of extruded Plastisol, the stripping is easy to keep clean as it can be washed with soap and water or with other normal cleaning solutions. It is aluminum gray. On pivot-hung doors Stan-Guard offers protection from drafts and minimizes losses of conditioned air. The Stanley Works, Magic Door Division, Dept. NS, New Britain, Conn. (Key No. 503)

Stan-Guard

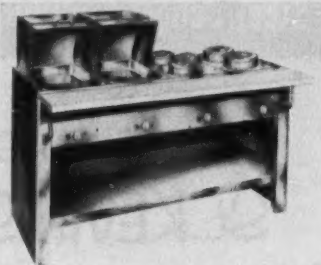
Stan-Guard is a device developed to effectively safeguard against injuries to fingers from accidental door closings. Stan-Guard safety protection runs the

Food Serving Table

Cooked meats, vegetables and soups can be kept at the correct serving temperature in the new Model 6914 Star Metal Hot Food Serving Table. Available for gas or electric operation, the

table is dry heated and features individual compartments, each with its own three-heat gas burner, pilot and adjustable valve, or five-heat electric unit. The top frame is constructed of heavy gauge, highly polished stainless steel with interchangeable stainless steel top panels designed to permit any desired serving arrangement.

Rounded front corners and an 8 inch wide maple cutting board are features of the base which has adequate insulation to keep fuel consumption at a minimum. The stainless steel roll covers are designed with a flat top that may be used as a hot serving shelf. The new table is 58 inches long, 24 inches deep and 34



inches to working top and is available in stainless steel or baked enamel finishes. Star Metal Manufacturing Co., Inc., Dept. NS, Trenton Ave. and Ann St., Philadelphia 34, Pa. (Key No. 504)

(Continued on page 186)

Planning a New Greenhouse?

Before you buy or build, be sure to get complete information and prices on...

Everlite

ALUMINUM GREENHOUSES

"WORLD'S FINEST"

Free-Standing and Lean-To Models for Every Educational and Research Need

Check These EVERLITE Features:

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(Nothing to rust, rot, warp, swell, shrink, scrape, paint or otherwise to maintain)
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AUTOMATIC HEATING AND VENTILATING EQUIPMENT AVAILABLE

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"Dodge School Buses are truly rated for the job"

Why New DODGE "Job-Rated" SCHOOL BUSES are safer and more economical

Greater Stop-Ability—New Dodge dual-primary-type brakes stop smoothly and hold whether the bus is moving forward or backward. This means dependable safety when stopping on even the steepest hills. Such reliable brakes are but one of many ways in which Dodge school bus chassis and equipment meet or exceed the safety standards established by the National Conference on School Bus Standards.

Budgetwise Power—Three economy-minded engines (two brand-new) develop up to 122 horsepower. Thus snow and mud have less chance to mire or delay Dodge school buses. Two fuel filters, chrome-plated top piston rings and advanced-design carburetor help stretch maintenance dollars, too. See your friendly Dodge dealer. Get the facts on Dodge "Job-Rated" school buses.

... says **R. C. HESS**, Superintendent of Transportation, Wasco School System, Wasco, California

"Wasco School System has been buying Dodge school buses for the past 26 years. One of the many reasons we operate a fleet of eight Dodge school buses today is because they are so dependable.

"Dodge school buses are specifically designed for multiple-stop service. This cuts maintenance and operating costs and proves to me that Dodge school buses are truly rated for the job."

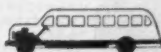
DODGE

"Job-Rated"

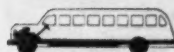
SCHOOL BUS CHASSIS



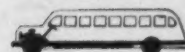
MODEL FS-152
10,475 and 11,450 lbs., G.V.W.
For 30 and 36 pupils.



MODEL HS-192
14,200 and 15,500 lbs., G.V.W.
For 48 pupils.



MODEL JS-212
15,750 and 17,000 lbs., G.V.W.
For 54 pupils.



MODEL RS-229
17,675 and 19,500 lbs., G.V.W.
For 60 pupils.

What's New ...

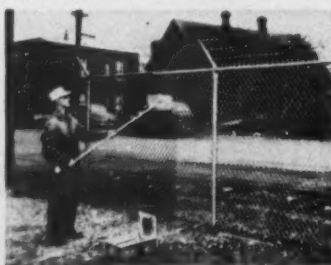
Sandwich Unit

A small low-priced sandwich unit has been introduced for use in small lunch rooms, tea rooms and fountains. The Serv-All Sandwich Unit fits into any standard ice cream cabinet yet provides complete facilities for serving all kinds of cold meat and salad sandwiches. Four containers covered by two double lids for sandwich spreads or pickles, a storage rack for sliced meats and cheeses and a sectional type maple cutting board are included in the compact unit. Smith-Werner Co., Dept. NS, 610 Santa Fe Drive, Denver, Colo. (Key No. 505)

Fence Painter

Designed to apply enamel to wire fences quickly, using a minimum of material, the FencPainterR consists of a mop-like applicator mounted on a roller. It is dipped into a special enamel receptacle and is rotated against the fence by means of a long handle. A spring suspended metal grid in the enamel receptacle ensures exactly the correct depth of immersion. The capillary attraction of the applicator strands holds waste of material due to spattering at a minimum. The applicator may be used for painting flat or corrugated iron and sheet metal of all kinds. In

painting wire fence, the FencPainterR gives good coverage of the back of the



fence, making the job easily finished. FencPainterR enamel is also available. It has a fine pigment grind and employs a new chemical with a creeping action to ensure better coverage, as well as a rust solvent. Fence-Painter Corp., Dept. NS, 2314 W. Van Buren St., Chicago 12. (Key No. 506)

"Cubelet" Ice Maker

Small ice "cubelets," $\frac{3}{8}$ inch in size, are made in the new Frigidaire ice making machine. The small size makes the ice cool faster for beverages while lasting longer than crushed or chipped ice.

The new ice maker is similar in design and construction to the Frigid-

aire machines making the larger sized cubes except for the cutting grid. Thickness of the cubelets can be adjusted to meet individual requirements. The stainless steel storage bin holds approximately 10,000 cubelets and the machine makes approximately 200 pounds or 20,000 cubelets per day. The machine operates automatically, is powered by a Frigidaire Meter-Miser rotary compressor, and the temperature in the storage compartment is such that cubelets do not stick together. The compact, all-steel cabinet is counter height and the top can be used as a working surface. The interior of the cabinet is porcelain finished and the removable top has acid-resisting porcelain finish. Frigidaire Division, General Motors Corp., Dept. NS, Dayton 1, Ohio. (Key No. 507)

Rubber Runner Matting

A new runner matting made from live resilient corded rubber in 3/16 inch thickness is introduced as the Do-All Long-Ribbed Rubber Runner Matting. It is long lived and easily cleaned and comes in red, green, blue, mosaic and black in 34 inch width. Sure footing is provided by the traction-type ribbing. D. W. Moor Co., Dept. NS, Adams St., Toledo 2, Ohio. (Key No. 508)

(Continued on page 190)

DOLCOWAX for BEAUTIFUL FLOORS

DOLCOWAX is a premium-quality floor wax for general use, sold with the guarantee that, regardless of price, no competing floor emulsion wax will outwear it! Easily applied, DOLCOWAX leaves a beautiful, lustrous film, hard and durable, which actually improves in lustre under foot traffic.

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SANITARY SURVEY
of Your Premises
consult your
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DOLGE has a floor finish for every specific purpose. If you have a special floor maintenance problem, your Dolge Service Man will gladly demonstrate the correct finish. No obligation, of course.

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FOR THE SCHOOL!

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Amazingly instructive: builds receiver, amplifier, oscillator, signal tracer, timer, photo cell relay, etc. With all parts, tubes, mike, instructions. 83-265. Only \$14.25
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U.S. District Court Thomas Jefferson Memorial Internal Revenue

BUILT TO ENDURE FOR GENERATIONS, IT IS SIGNIFICANT THAT THESE

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AND OTHER OUTSTANDING LANDMARKS OF OUR NATION'S CAPITAL ARE

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A basic reason for this great preference is that Barrett Built-up Roofs—including the world famous Barrett Specification* Roof—are the first choice of America's architects and builders. These are the men who want to be sure that the roofs they specify and apply give the best protection in the world—and with Barrett they get it!

FOR YOUR SCHOOL: When the time comes to re-roof your schools make certain that you have the superior protection of a Barrett "SPECIFICATION" Roof. A Barrett Approved Roofer working with the finest roofing materials and methods will apply the roof under the supervision and inspection of a specially trained Barrett inspector. Bonded by the Continental Casualty Company for periods up to 20 years, these roofs regularly outlast their bonded period.



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ORDER YOUR MAINTENANCE AND FLOOR TREATMENT
SUPPLIES NOW FOR SUMMER CLEAN-UP



Check Your Supplies Now

FLOOR AND GYM FINISHES
FLOOR DRESSINGS
WAXES • FLOOR SEALS
SANITARY SUPPLIES
DISINFECTANTS • SUPPLIES AND
MAINTENANCE EQUIPMENT

HILLYARD

Maintaineers (floor treatment experts) take the worry out of summer school clean-up problems for you. After you lay out your work program and are away for the vacation period the Hillyard Maintaineer will follow through with your janitorial staff. His services are free. He will recommend the best and most economical methods and materials. He's a trained floor expert and can guarantee that the work you lay out will be thoroughly accomplished. Be sure to order supplies early to avoid late arrivals or shortages that mean costly delays. For faster service, wire or call us direct.

Send Now For **FREE**
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Handy Complete
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the Job Easy

Includes check
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Maintaineer is on
Your Staff—Not
Your Payroll

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Dear Sirs,

- ☐ Please send today a FREE copy of your Complete Inventory and Check List.
☐ Please have the Hillyard Maintaineer in my territory call NOW.

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SCHOOL _____
POSITION _____
ADDRESS _____
STATE _____



**St. Joseph,
Missouri**

Branches and Warehouse Stocks in Principal Cities

Designed for safety . . . built for the job!



CHEVROLET SCHOOL BUS CHASSIS



212-INCH WHEELBASE SCHOOL BUS CHASSIS

Gross vehicle weight, 13,500 or 16,000 pounds, depending on tire equipment. Accommodates bodies of 48- to 54-pupil capacity. Chevrolet Loadmaster valve-in-head engine, 200 foot-pounds torque (pulling power) at speeds governed under 35 m.p.h. Heavy-duty brakes; Torque-Action, front; Twin-Action, rear; Dual-Shoe, parking.

199-INCH WHEELBASE SCHOOL BUS CHASSIS

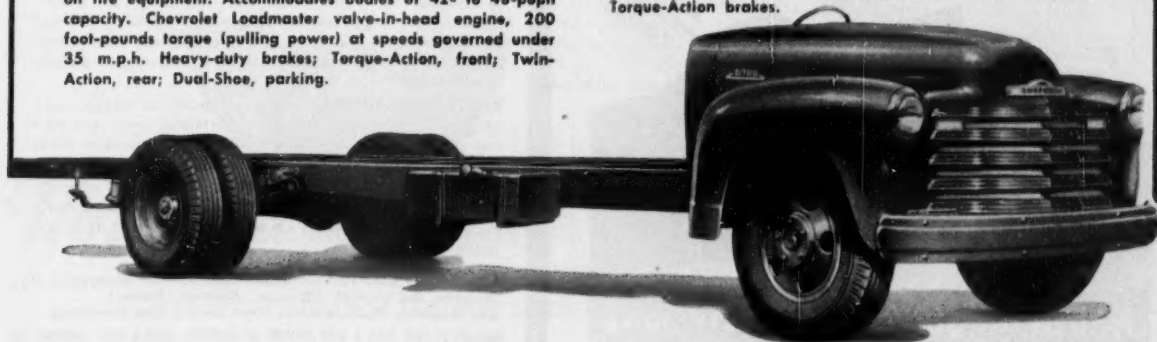
Gross vehicle weight, 13,500 or 16,000 pounds, depending on tire equipment. Accommodates bodies of 42- to 48-pupil capacity. Chevrolet Loadmaster valve-in-head engine, 200 foot-pounds torque (pulling power) at speeds governed under 35 m.p.h. Heavy-duty brakes; Torque-Action, front; Twin-Action, rear; Dual-Shoe, parking.

161-INCH WHEELBASE SCHOOL BUS CHASSIS

Gross vehicle weight, 10,500 or 12,000 pounds. Accommodates bodies of 30- to 36-pupil capacity depending on tire equipment. Thriftmaster engine, 176 foot-pounds torque (pulling power) under 35 m.p.h. governed speed. Heavy-duty brakes; Torque-Action, front; Twin-Action, rear; Dual-Shoe, parking.

137-INCH WHEELBASE JUNIOR SCHOOL BUS CHASSIS

Gross vehicle weight, 7600 pounds. Accommodates bodies of 16-pupil capacity. Chevrolet Thriftmaster valve-in-head engine, 176 foot-pounds torque (pulling power) under 35 m.p.h. Torque-Action brakes.



What's New ...

Finger-Flite Typewriter

The new Underwood Finger-Flite Electric Typewriter is designed for func-



tional efficiency and is available in five models. The new Finger-Flite keyboard has keytops of light gray, especially created for speed and finger comfort. Function keys are in dark blue to give instant color control between the operating and feature keys. The top plate has been redesigned to give greater visibility of the writing line and to give the machine a lower appearance. It has a wider writing line margin; a new carriage positioning scale; a three-position paper bail; a new push-in type variable line spacer, and a new impression control dial for automatic selection of the

proper key impact for any desired number of carbon copies. It is finished in soft gray with harmonizing dark blue base. **Underwood Corporation, Dept. NS, 1 Park Ave., New York 16. (Key No. 509)**

Poly-Krome Asphalt Tile

A new design in asphalt tile flooring. Poly-Krome is described as terrazzo in resilient type tile. Multi-colored chips are set deep into the surface of the tile and retain their brilliance for the life of the floor. Poly-Chrome is available in a range of ten colors to harmonize with any decorative plan. **Hachmeister-Inc., Dept. NS, Box 357, Pittsburgh 30, Pa. (Key No. 510)**

Adding Machine

Especially designed for business and administrative offices where considerable accounting has to be done at low cost, the new Clary hand-operated adding machine is also suited for classroom use because of its simple operation in adding, subtracting and multiplying. It incorporates advanced engineering features and has a streamlined design finished in two-tone gray. The "rapid handle return" feature increases work speed and

its forward stroke is controlled against operator abuse.

The versatile, easily operated machine features automatic space-up of totals and subtotals for easy reading, handspan keyboard to fit any size hand, pyramid keys to protect fingernails, extra capacity key that doubles listing capacity and rotary action for smooth, quiet performance.



It is compact in size and light enough in weight to be easily portable. **Clary Multiplier Corp., Dept. NS, 408 Junipero St., San Gabriel, Calif. (Key No. 511)**

(Continued on page 192)



The illustration, below, shows the Naden "Instant-Vue" Model N-400-IV—the finest football scoreboard made. Other Naden models, in a wide range of types and sizes, are available to meet every scoring need.

**SIMPLE
COMPACT
ACCURATE
DEPENDABLE**

Write For Free Catalog No. N-53



NADEN AND SONS WEBSTER CITY, IOWA

PAGE FENCE - Since 1883

• AMERICA'S FIRST WIRE FENCE •



**EVERY STEP IS QUALITY CONTROLLED—
FROM RAW METAL TO THE ERECTED FENCE**



• Page Chain Link Fence, pioneered by PAGE and produced only by PAGE, offers reliable protection against hazards which threaten both property and persons.

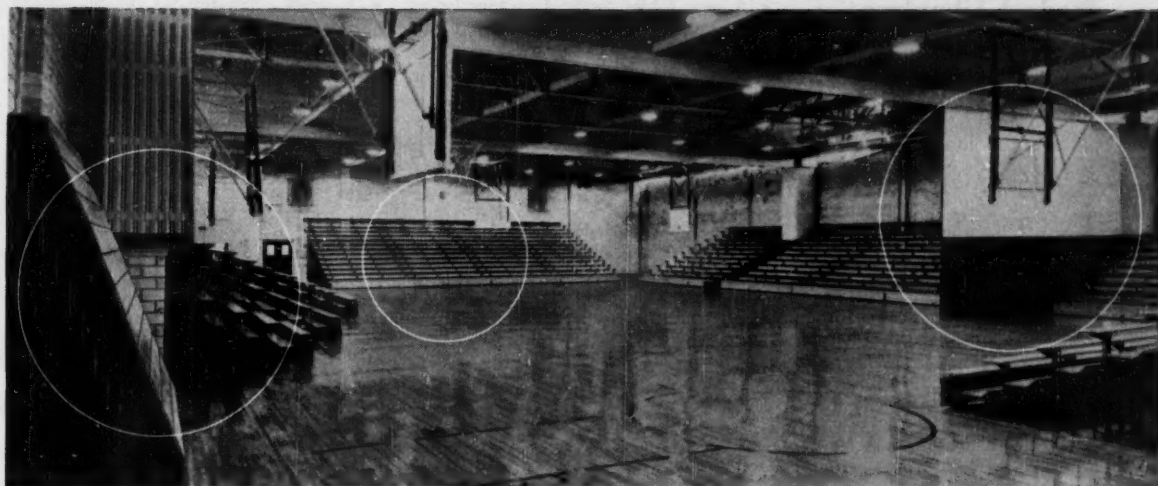
YOUR CHOICE OF THREE SUPERIOR METALS is assurance that your fence will best meet your needs. Choose heavily-galvanized Copper Bearing Steel, or long-lasting Stainless Steel, or corrosion-resisting Aluminum. Interlocking wires are woven to form a strong, uniformly square mesh.

EIGHT BASIC STYLES, varied by choice of metals, wire gauges, heights, types of gates, posts and post tops, and top rails. Tension and fabric bands not removable from outside. Gate frames welded at joints.

IT'S TIME TO THINK, AND ACT. Page Fence is expertly erected by technically trained firms conveniently located throughout the country. For illustrated PAGE data and name of nearest firm...

Write to PAGE FENCE ASSOCIATION in Monessen, Pa., Atlanta, Bridgeport, Chicago, Denver, Detroit, Los Angeles, Philadelphia, New York or San Francisco.

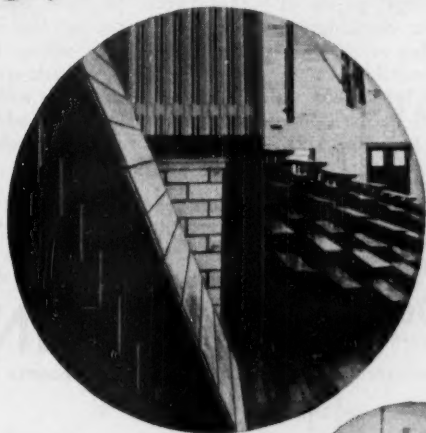
PRODUCT OF PAGE STEEL & WIRE DIVISION OF AMERICAN CHAIN & CABLE COMPANY, INC.



3 gyms in one make sense



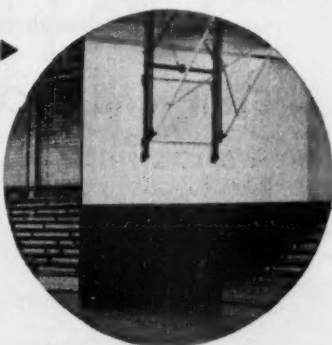
HORN Seats—folded mean plenty of room for practice. A smooth, safe surface protects players.



HORN Seats—extended mean plenty of room for the paying crowd. Comfortable, easy to clean.



HORN Partitions—electrically operated, easily folded back for exhibitions, or extended to provide two or more practice gyms.



FOR SAFETY, plan with HORN! Horn folding gym seats provide a smooth, sloping surface when folded . . . real protection for the vital zone!

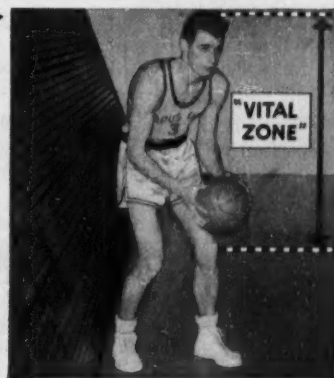
They'll pay for themselves in use! Horn planning and equipment give you maximum gym use—for exhibitions that pay—for efficient practice.

Your local Horn representative helps you plan. Horn factory crews supervise installation. Horn quality construction gives years of trouble-free service.

Write today for details on Horn folding gym seats and partitions—and the new folding stages.

Horn

SCHOOL EQUIPMENT DIVISION OF
THE BRUNSWICK-BALKE-COLLENDER COMPANY
623 SOUTH WABASH AVE., CHICAGO 5, ILLINOIS



What's New ...

Product Literature

• All applications of the **Deluxe Maintenance Machine** manufactured by the American Floor Surfacing Machine Co., 518 S. St. Clair St., Toledo 3, Ohio, are discussed in a new insert issued by the company. In the layout, the machine is pictured in six actual operations: scrubbing, polishing, disc sanding, steel wooling, buffing and grinding. The thoroughly tested attachments are illustrated. They can be put on or taken off in seconds without the use of tools. Details of the new Deluxe "Swing-Around" handle and the Safety-Grip switch are also discussed. (Key No. 512)

• The new 2 color **Folio No. 1-53** issued by Gruber Lighting, 125 S. First St., Brooklyn 11, N. Y., illustrates and describes over thirty different incandescent lighting fixtures. The units listed are for institutional and commercial interiors and include a wide variety of types and sizes. Complete specifications for each unit are included. (Key No. 513)

• More than 1400 subjects are covered in the new catalog, "**Selected Motion Pictures**," issued by Association Films, Inc., 347 Madison Ave., New York 17. Educational films are listed under subject headings and the catalog is fully indexed. (Key No. 514)

• A new folder, printed in four colors, illustrates **BTC Hostess Folding Chairs and Banquet Tables**, as well as vertical and horizontal trucks for storing and moving this equipment. The folder also shows, in full colors, the plastic covering available to upholster these chairs. The folder is available from The Brewer-Titchener Corp., Cortland, N. Y. (Key No. 515)

• A 24 page booklet, "**Electronics for Audio-Radio-Television**," has been released by David Bogen Co., Inc., 29 Ninth Ave., New York 14. The full line of amplifiers, phonographs, public address systems, AM-FM tuners and accessories is described and illustrated with specifications and prices. (Key No. 516)

• Three colorful posters, based on recent research in medicine and nutrition, have been prepared by the Florida Citrus Commission, Lakeland, Florida, to show why orange juice is important in the diet. The posters carry no advertising and each has been designed to attract the interest of pupils of varying ages, from lower elementary grades to high school. They are 18 by 25 inches in size and are suitable for use on bulletin boards or lunchroom walls. They are available from the Commission without charge. (Key No. 517)

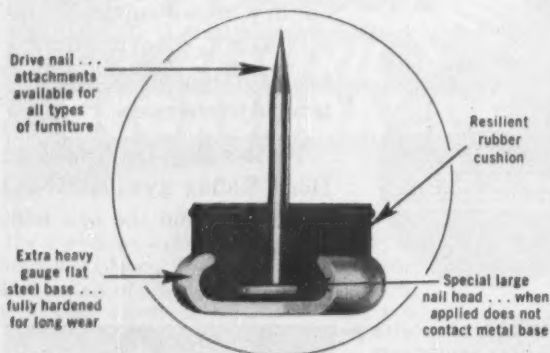
• A safety campaign for use by schools has been developed by Superior Coach Corp., Lima, Ohio. Consisting of an informative comic book for children, "Pioneer Pointers," and a companion poster for bulletin boards, the material features the Pioneer, a buckskin class scout who explains school bus safety rules in an entertaining and informative manner. (Key No. 518)

• How to control space with flexible interiors is shown in a 48 page manual, **Catalog No. 53**, issued by the Mills Company, 975 Wayside Road, Cleveland 10, Ohio. The book is based on thirty years of experience in the design, manufacture and installation of movable walls in commercial, industrial and institutional buildings and contains numerous installation and construction photographs, detailed construction drawings and complete specifications data. (Key No. 519)

• The use of adhesive in installing clay floor and wall tile is discussed in a booklet, "**Genuine Clay Tile**," K-400, issued by Tile Council of America, 10 E. 40th St., New York 16. The results of a survey on the installation of tilework by thin setting bed methods, the booklet gives basic specifications and commercial standards with discussion of thin setting, materials, advantages and disadvantages and results obtained. (Key No. 520)

(Continued on page 194)

BASSICK GLIDES for school furniture STOP NOISY SCRAPING OF FLOORS



Chairs, desks—practically any piece of school furniture—can be moved quietly without scuffing or scraping floors on these Bassick Glides. A complete range of sizes and types fit all wood and metal furniture. THE BASSICK COMPANY, Bridgeport 2, Conn. In Canada: Belleville, Ont.



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"LAYTITE" MAPLE FLOORING

MFMA Specifications

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THE WORLD'S FINEST—BAR NONE

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Behind the Mills—The Connor Timber Stands

'ROUND THE WORLD

YOU'LL FIND DEPENDABLE

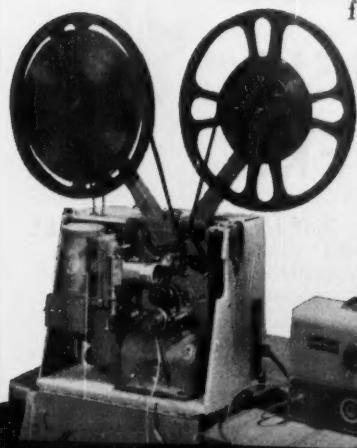
VICTOR

SERVICE

VICTOR PROJECTORS STAY YOUNG LONGER

When you buy a Victor Sound Projector, you can confidently look forward to *extra* years of trouble-free performance. So many Victor owners point with pride to projectors purchased as long as 15 or 20 years ago which are still in first-class operating condition.

There are several important reasons behind Victor dependability. First of all, Victor pioneered in 16mm — and for more than 40 years has devoted its time and effort almost entirely to the development and improvement of motion picture projectors and service. Victor Service Centers, staffed with factory-trained personnel, are located in key cities throughout the world to bring you better service and longer projector life.



*Only Victor has MAGNESOUND
— a low-cost attachment for re-
cording sound or music (or both)
on film. Fits any Victor projec-
tor, old or new.*



VICTOR
ANIMATOGRAPH CORPORATION

DAVENPORT, IOWA

New York • Chicago • Distributors Throughout the World

BUILDERS OF QUALITY MOTION PICTURE EQUIPMENT SINCE 1910

What's New ...

• A revised list of MFMA approved floor finishing products is now available from the Research Dept., Maple Flooring Manufacturers Association, 35 E. Wacker Drive, Chicago 1. All floor finishing products on the list have been examined under new specifications and include both the penetrating sealer and the bakelite type floor finishing products. (Key No. 521)

• "Are You an Electric Typist?" is the title of a folder giving information on a new plan designed to help school administrators and business education teachers acquire the facilities needed for training advanced students in electric typing. Booklet RE-516 issued by Remington Rand Inc., 315 Fourth Ave., New York 10, tells the story of the Business Education Advancement Program instituted by that company. (Key No. 522)

• Elevation drawings of Emco Classroom Wardrobes, sectional drawings and photographs are used to illustrate the operation and efficiency of these classroom units. Among the units discussed are wardrobes, teacher closets, supply closets and bookcases with receding or pivot type doors. The 8 page catalog is available from Equipment Manufacturing Co., Inc., 1208 E. 9th St., Kansas City 6, Mo. (Key No. 523)

• The Loxit Floor-Laying System is discussed in Catalog F.L. 1953 available from Loxit Systems, Inc., 1217 W. Washington Blvd., Chicago 7. The principle of the Loxit system, typical specifications, how the system operates and instructions for its use are covered fully in the text with cut-away drawings illustrating the points discussed. (Key No. 524)

• A new catalog showing the new balanced door control mechanism for 1953 Ellison Balanced Doors is now available from Ellison Bronze Co., Inc., Jamestown, N. Y. The new control mechanism is illustrated and described with functions of Ellison balance principle discussed in three steps. Illustrations include photographs showing design possibilities and line drawings showing construction details. (Key No. 525)

• A new plumbing drainage products Catalog K is now available from Josam Mfg. Co., Dept. X58, Michigan City, Ind. The 208 page catalog contains complete information on plumbing drainage products and is arranged for quick and easy comparison, selection and specification. Base products are shown side by side with all variations illustrated in one view, so that comparison and choice are simple. The catalog has been carefully indexed. (Key No. 526)

• The complete line of chairs, tables and desks manufactured by Thonet Industries Inc., 1 Park Ave., New York 16, is illustrated and described in a new catalog entitled "From Kindergarten to College." The catalog celebrates the 100th anniversary of this company in the United States, and the illustrations indicate the progressive thinking of the company. Furniture for classrooms, libraries, dining halls, cafeterias, utility rooms and lecture rooms is available in standard Bentwood styles, in traditional designs and in the most modern plywood developments, including chairs and tables that stack. Oblong, square, round, hexagonal and trapezoidal tables are offered with various types of tops, including plastic surfaces. Also shown is furniture suitable for lounge and sitting rooms. (Key No. 527)

• Primary functions of Mississippi Glass products are carefully detailed in the new Catalog No. 53 issued by Mississippi Glass Co., 88 Angelica St., St. Louis 7, Mo. The catalog is designed to aid administrators, architects, engineers and decorators in their selections of Mississippi glass products. Light distribution charts of each pattern are presented and technical information on Coolite, Heat Absorbing and Glare Reducing Glass as well as tabular data on the complete line are included. (Key No. 528)

(Continued on page 196)

MAYLINE



**SPECIFY
MAYLINE PRODUCTS
FOR YOUR
CLASSROOM**

The Standard table is ideal for drafting, commercial art, and general drawing purposes. This reasonably priced table is worthy of your further interest and inquiry.

Another popular table is the Master with pivot point at the front edge of the board.

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Available in combination—as shown, table only, table with tool drawers, or table with board compartment.

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MAYLINE

**SAVE EQUIPMENT
SAVE FLOORS
SAVE MONEY
and TIME**

**DARNELL
CASTERS**



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Darnell Double Ball-Bearing Swivel Piano Casters are radically different from any other piano casters. Ideally suited for use in schools, churches, broadcasting studios, homes, and other places where the easy movement of pianos is an advantage.

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Manual

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36 North Clinton, Chicago 6, Illinois

The Wakefield Star and Commodore both have translucent Plaskon reflectors which completely shield the lamps and, when the lamps are lit, have about the same brightness as the ceiling above. This is a basic requirement of supplementary lighting systems for co-ordinated classrooms.

**To Light a Co-ordinated Classroom
you need a luminous indirect fixture like the**

Wakefield { **STAR (fluorescent)**
COMMODORE (incandescent)

- ① Only a luminous indirect fixture like the Wakefield Star or Commodore will provide smoothly distributed, well balanced light, free from glare and sharp brightness contrasts.
- ② Only a luminous indirect fixture like the Wakefield Star or Commodore will create three-dimensional seeing conditions by making the ceiling the primary light source, with the fixture itself and the side walls becoming a secondary source.
- ③ Only a luminous indirect fixture like the Wakefield Star, which has a minimum of opaque cross-section and a maximum of translucency, will permit fullest transmission of upward beams of daylight from directional glass block.

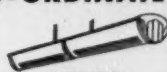
Our new 20-page book, "Supplementary Lighting for the Co-ordinated Classroom", deals simply but comprehensively with modern classroom lighting. For your copy, write to The F. W. Wakefield Brass Company, Vermilion, Ohio.

Wakefield **Over-ALL Lighting**

BASIC FOR CO-ORDINATED CLASSROOMS



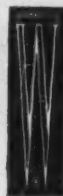
THE COMMODORE



THE STAR



THE WAKEFIELD CEILING



What's New ...

• **The Dunham Product Application Manual** is a "Handbook of Heating" designed to give complete information on heating systems and how to select and apply heating equipment. Available from C. A. Dunham Co., 400 W. Madison St., Chicago 6, the comprehensive 400 page board-bound manual is a veritable encyclopaedia of heating information. Subjects covered include wet heating systems, radiation, unit heaters, pumps, control equipment, engineered radiation, blower unit heaters, special purpose pumps and related products and specialties. There is also a section on engineering data and one on terminology. The book is fully indexed and is illustrated by charts, graphs, line drawings, and photographs. Listed at \$5, copies of the book can be obtained for the present at the introductory price of \$2.50 each. (Key No. 529)

• **A List of Free Aviation Education Materials and Services** offered by United Air Lines, Inc., School and College Service Dept., 5959 S. Cicero Ave., Chicago 38, is available to educators. The list includes slidefilms, bulletin board material, motion pictures and booklets for teachers and pupils. (Key No. 530)

• A new 60 page informative catalog on incandescent lighting has recently been released by The Art Metal Co., 1914 E. 40th St., Cleveland 3, Ohio. Called "A Comprehensive Factual Definition of Art Metal Incandescent Lighting," the catalog gives data on 47 new products. Information contained in the catalog is arranged to provide all data needed to make the specifying and planning of incandescent lighting easier, quicker and more exact. The booklet serves as a reference source for information on incandescent lighting. (Key No. 531)

• The results of a survey on "Window Covering Costs and Upkeep" based on a typical 4 by 5 foot window are now available in a folder released by Vertical Blinds Corp. of America, 1936 Pontius Ave., West Los Angeles 25, Calif. The survey answers questions regarding the use of average window coverings including purchase costs, cleaning costs, cleaning time and upkeep of various types of window coverings. (Key No. 532)

• The 1953 Edition, **Catalog 90, Sanymetal Toilet Compartments** is now available from The Sanymetal Products Co., Inc., 1701 Urbana Rd., Cleveland 12, Ohio. Detailed engineering information and architectural specifications on shower stalls and cubicles are provided in the new catalog which provides a selection chart of types of compartments. Both ceiling-hung and floor-support types are shown and a color chart with color chips offers selection of 22 colors. One page describes and illustrates Sanymetal Toilet Compartment Hardware. (Key No. 533)

• The new **Penco Steel Shelving Catalog No. S-300** is a 20 page booklet giving detailed information on a wide line of adjustable steel shelving. Complete specifications, ordering information and typical installations are shown as well as suggestions on how users can save time, labor, materials and storage space by using Penco shelving. The unusual design flexibility of the shelving and the interchangeability of parts permits planning shelving installations to fit almost any specialized storage need at economical cost. The catalog is available from Penn Metal Corporation of Penna., 50 Oregon Ave., Philadelphia 48, Pa. (Key No. 534)

• The **Lawler Line of Thermostatic Control Vales** is described and illustrated in **C-5 Condensed Catalog** released by Lawler Automatic Controls, Inc., Mt. Vernon, N. Y. (Key No. 535)

Film Releases

"Royal Scotland," 16 mm. sound film, Technicolor, 9 minutes. 35 mm. filmstrips on "London's River," 24 frames; "Queen Elizabeth II," 25 frames; "African Development in Southern Rhodesia," 25 frames, and "Century of Progress—Lighting and Heating," 20 frames. **British Information Services, Dept. NS, 30 Rockefeller Plaza, New York 20.** (Key No. 536)

"Robert E. Lee: A Background study," 1½ reels; "First Aid: Fundamentals," 1 reel; "Community Governments: How They Function," 1¼ reels; "Understanding Our Earth: Soil," 1 reel; "Working Safely in the Shop," 1 reel, and "Geography of the Middle Atlantic States," 1 reel, all sound, color or black and white. **Coronet Films, Dept. NS, 65 E. South Water St., Chicago 1.** (Key No. 537)

Six films on political science: "Political Parties," "Pressure Groups," "Centralization and Decentralization," "Social Revolution," "Nationalism," and "World Balance of Power," for high school and college classes. **Encyclopaedia Britannica Films Inc., Dept. NS, Wilmette, Ill.** (Key No. 538)

"Growing Things," 7 filmstrips in color for primary science, including: "Plants Grow," "Trees Grow," "Butterflies Grow," "Toads Grow," "Birds Grow," "Rabbits Grow," and "We Grow," 24 to 26 frames each. "Age of Discovery and Exploration," 7 mapstrips in color, for history and social studies classes, including: "The Crusades and Early Trade Routes," "The Norsemen," "Portugal Seeks a New Route East," "A New World Is Discovered," "Spanish Explorations," "French Explorations," and "English and Dutch Explorations," each 13 to 16 frames. **The Jam Handy Organization, Dept. NS, 2821 E. Grand Blvd., Detroit 11, Mich.** (Key No. 539)

"Stories of Yesterday's World," 13 quarter-hour films, color or black and white, telling the stories of "The Land Without Women: Mr. Athos," "The Mystery of Tiahuanacu," "The Mystic Alhambra," "The Enchanted City, Petra," "The Tragedy of Mt. Pelle," "The Magic Walls of Carcassonne," "The Amazon Boomtown, Manaus," "King Minos and the Minotaur," "The Lost City of the Incas," "The Miracle Builders," "The Haunts of the Pirates," "The Course of Columbus" and "Floods, Pharaoh and Fellahin, the Story of the Nile." **Simmel-Meservey, Dept. NS, 321 S. Beverly Drive, Beverly Hills, Calif.** (Key No. 540)

Discussion film for teen-age groups, "Responsibility," 1¼ reels. "Intermediate Art Series," 8 color filmstrips. "Children of Europe," 6 color filmstrips. "Through the Seasons Series," 4 color filmstrips. "Elementary Science Series Set No. 3," 6 filmstrips. "Cooking Series," 8 filmstrips. "Punctuation Series," 5 color filmstrips. **Young America Films, Inc., Dept. NS, 18 E. 41st St., New York 17.** (Key No. 541)

Suppliers' News

Beatty Scaffolds, Inc., Tunnel Ave. and Beatty Rd., San Francisco 24, Calif., manufacturer of folding bleachers, folding stages and scaffolds, announces that the following firms have been franchised to manufacture Beatty Rollway Bleachers: Snyder Tank Corporation, Buffalo, N. Y. and Birmingham, Ala.; Otepeco, Inc., London, Ohio; Beatty Bleacher Division, Safway Steel Scaffolds, Inc., Detroit, Mich.; Beatty Midwest Grandstand Corp., Milwaukee, Wis., and Sarnia Bridge Co., Ltd., Sarnia, Ontario, Canada.

Freed Electronics and Controls, Corp. is the new name of the firm manufacturing nucleonic instruments, electronic devices and radio and television receivers at 200 Hudson St., New York 13.

The Service Appliance Co., Norwalk, Conn., manufacturer of the Peelmaster line and other electrical appliances for public feeding, announces the merger of its facilities with four other factories in Norwalk.

The following manufacturers have announced changes in address:

Arthur L. Peirson & Co., manufacturer of food products, from 189 Chrystie St., New York 2, to South End Blvd. and Montrose, Vineland, N. J.

Refrigerated Equipment Sales Corp., manufacturer and distributor of refrigerators and similar equipment, from 19 W. 44th St., New York 18, to 80 W. Broad St., Mount Vernon, N. Y.



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CHICAGO 11, ILLINOIS

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These cards are detachable and are provided for the convenience of our subscribers, and those to whom they pass their copies, in obtaining information on products and services advertised in this issue or described in the "What's New" Section. See reverse side.

May, 1953

Please ask the manufacturers, indicated by the numbers I have circled, to send further literature and information provided there is no charge or obligation.

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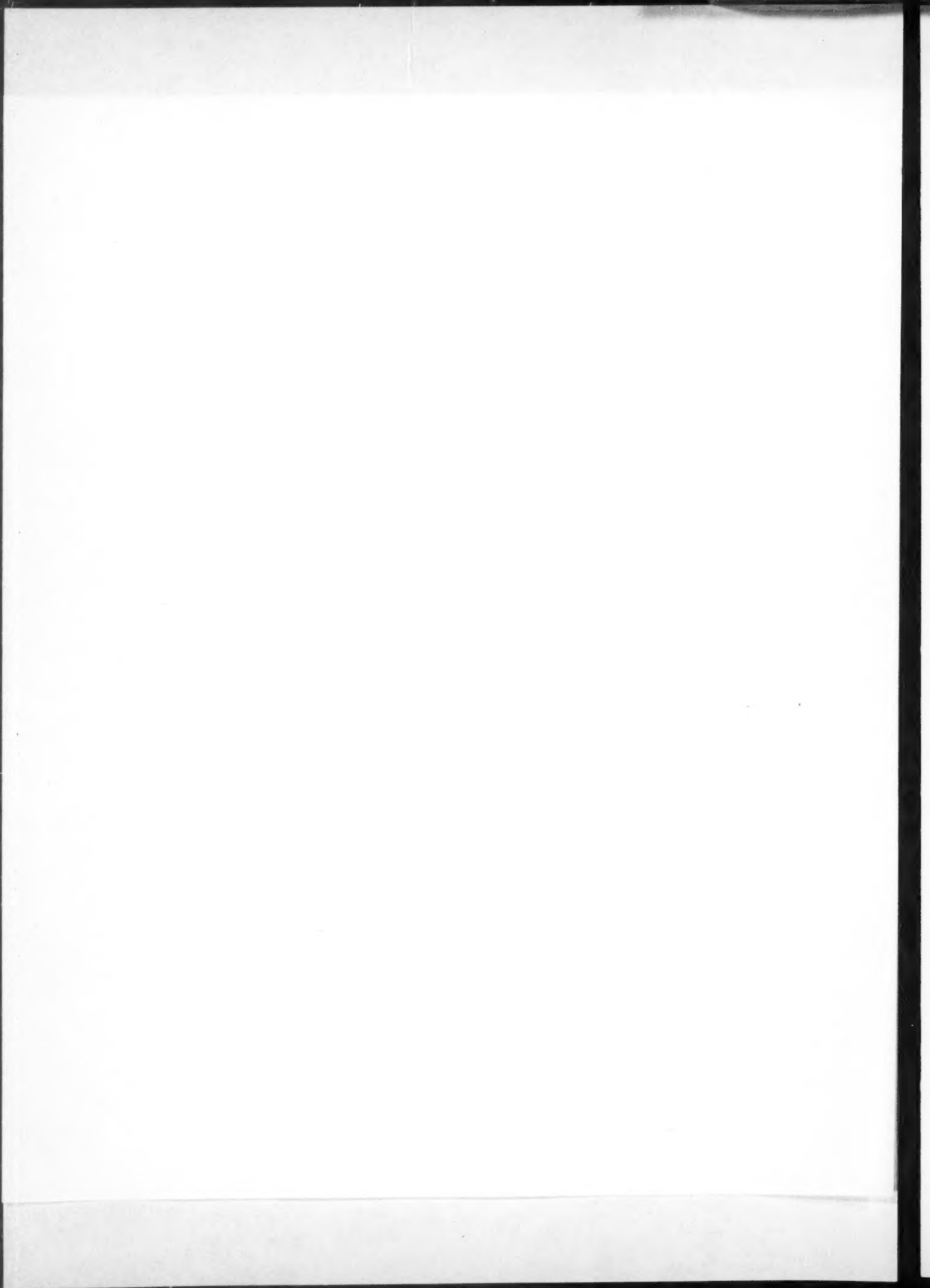
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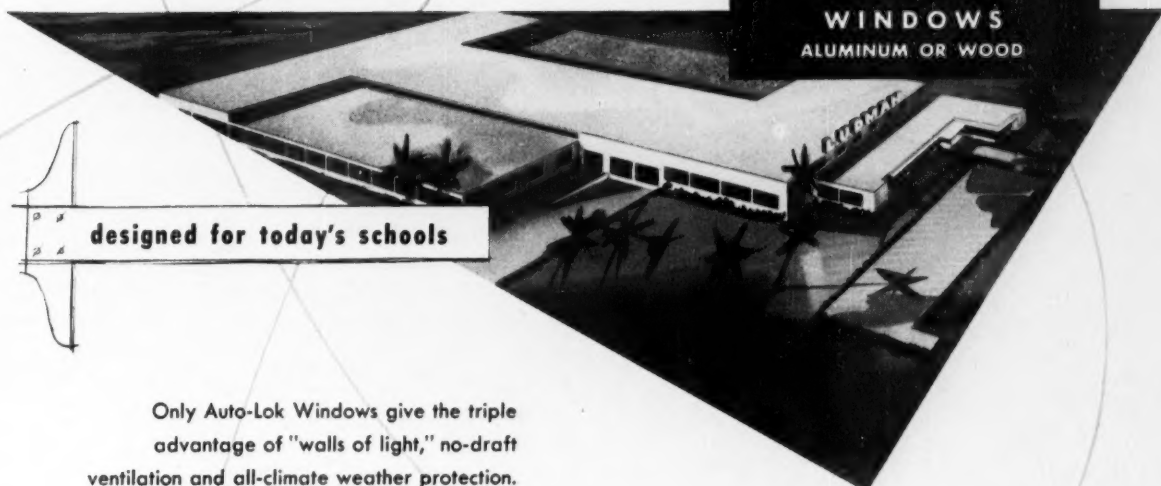


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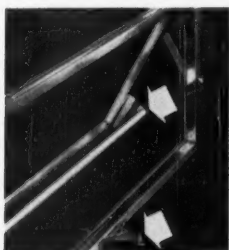


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How Honeywell Controls help improve student learning



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Today, this ideal classroom atmosphere is being enjoyed by thousands of students in hundreds of schools where Honeywell Control systems are being used.

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For a copy of Dr. D. B. Harmon's booklet, "Controlling the Thermal Environment of the Co-ordinated Classroom," or the interesting folder, "5 Ways Teachers Can Improve Learning," write Honeywell, Dept. NS-5-106, Minneapolis 8, Minnesota.



The importance of Individual Room Temperature Control

When each room has its own Honeywell Grad-U-Stat (shown above), heat and fresh air can be regulated to meet the changing conditions that affect students' comfort. For example, the Grad-U-Stat can be set to supply less heat and more fresh air during tests or increased classroom activity.

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